

CITY GOVERNMENT

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SALT WATER PIPE SYSTEM OF BOSTON.

The fact that Boston has covered a portion of its business district with a 12-inch water main to be supplied with salt water by one or more fireboats at a pressure of 200 pounds per square inch, or more if necessary, is well known to the public generally. All men who are familiar with the business district of Boston and have had experience in fighting fires must know that there is not another district of the same area in any city in the country where the fire hazard is greater or where it is more difficult to stop the progress of a fire when once underway. The overhead electric wires that previous to 1894 were an obstruction and a source of danger to firemen in the performance of their duties, and to which may be charged the origin of many fires and the spread of others, have been removed and placed where they belong—under the surface of the streets. But these same streets (or many of them) are still narrow and crooked; are during many hours of the day so obstructed by street cars and other kinds of traffic as to make it impossible for the fire apparatus to make even decent haste on its way to the scene of a fire. Some of you may say that that splendid piece of engineering, the subway, that has recently been completed, will reduce the street car traffic on the surface of the streets. In reply to that I will say that with the exception of Tremont street no decrease is as yet noticeable.

Those who have from the first labored to have the waters of the Atlantic ocean and the Charles river utilized for the protection of our city against the ravages of fire deserve the thanks of their fellow-citizens, and are to be congratulated on the completion of this first installment of a comprehensive system of fire protection. This 12-inch salt water main, with its hydrants and electric signals, is only the beginning of what must come if its great advantages can be fully utilized, but that cannot be done by our splendid fire department with its present appliances.

The recent fire in the Home Insurance building in New York proved beyond a doubt that the best-equipped modern fire departments are unable to cope with fires in buildings that are said to be fire-proof when more than nine stories high. The passenger and freight elevators

have made the modern sky-scrapers possible and profitable, while the improved methods of manufacturing structural steel has reduced the cost of same and added to their safety.

While buildings have been climbing higher and higher, the methods for their protection against destruction by fire have remained stationery, until all must confess now that present methods must be abandoned and better ones adopted, or a limit placed on the height of all buildings to be erected hereafter. Which of these plans shall we adopt? Probably nine-tenths of the members of nearly every community will say adopt the latter plan. We hear men in every walk of life and the public press advocating a restriction on the height of buildings, and why should you not do the same?

But I must confess that I do not see the need of any such restrictive measures. I do not believe in tying the hands of those who have in the past, are at the present time, and will if permitted in the future, erect stately structures, containing every comfort and convenience that the inventive skill and accumulated wealth of the country can provide, because forsooth the present system of fire protection is inadequate. Do you know that such buildings do not go begging for tenants? Do you know that the upper stories are deemed the most desirable for most purposes, notwithstanding the outcry raised against them?

Will we calmly fold our hands and say that progress in fire extinguishing appliances and methods has reached its limit and must stop? I say "No;" let us with our ripe experience lead the way in bringing modern methods of fire protection up to and beyond the needs of the modern sky-scrapers, so that a fire in their very top stories can be handled as easily as though it was in the first or second floors. You may ask, "Can this be done?" My answer is that I propose to show one method of doing it, and I have no doubt but many of you will later on suggest improvements thereon, or point out some better plans. It is for us to point out what is needed and thereby create a demand for what there is such a crying need and the inventors and manufacturers will produce what is required.

Boston's salt water system is only the first step in the direction of better fire protection for high and low buildings

alike, but if she intends to lead the way in this direction, as she has in so many others, much more must be done than what has already been accomplished. Those who planned the present pipe line have profited by the mistakes and experience of others by increasing its size from 8 to 12 inches, giving more than twice the capacity of the systems in use in other cities and reducing the loss of head by friction in like proportion.

But I contend that the water forced through these pipes can be utilized only to a very limited extent, and much more must be done before it will afford that degree of protection that it can, and I hope will do it at no distant date.

The pressure in these pipes can be maintained at 200 pounds per square inch or more if necessary, but streams under this pressure could only be handled from the ground unless the pipe was carried up over 200 feet above the street. My experience in the past has been that fires that occur in buildings above the second story cannot be extinguished by streams of water, no matter how powerful when played from the street; the only effect such streams can have will be to confine the fire within the walls of the burning structure and prevent the flames from crossing the street. This was clearly shown to be the case at the great fire of November 9, 1872, in one instance that came under my observation. The buildings on the east side of Washington street, between Summer and Milk streets, were all burned to the ground, while those on the west side were saved. Tons of water were thrown on the fronts of these buildings, yet every one of them burned to the ground, most of them taking fire in the upper stories and wooden Mansard roofs, and burning downwards, and you all know that buildings are consumed much faster when burning from the bottom upwards than from the top downwards. Had there been adequate means to carry one-half of the streams of water used on that street to the level of the fire they would have done more effective work and much of the property destroyed would have been saved, not only at this point, but all over that fire swept district. Had that district been equipped with a system of which the salt water system connection with the fireboats is the nucleus it would have mattered little if all the horses in the city

were sick or well, and that fire would have been nipped in the bud and never have reached the conflagration stage.

That splendid and most effective work can be done by the powerful streams thrown from this pipe no one can deny, and that the expenditure for its construction was a wise one long deferred all must concede.

No matter how hot the fire that may be raging in most of our buildings is, it cannot escape therefrom when three or four of these salt water streams are brought to bear upon it, but I contend that we should aim to prevent fires from attaining any such magnitude by having this water on tap ready to pour on to every fire in its incipency.

I regret to say that the matter of automatic devices for protection from fire has received but little attention and less encouragement from the majority of the fire chiefs of this country, but I am sure if they will examine the records of some of them they will have to admit that they need no defense from any one. I will deal with but one of these—the automatic sprinkler—because its birth and subsequent growth was due to the necessities of certain New England industries, in which the fire hazard was so great that insurance could not be obtained unless at what would be considered an exorbitant price. They had to insure themselves, and they formed the first Factory Mutual Insurance Company; they gradually improved the condition of their property and hose, and last but not least, the automatic sprinklers, which when perfected filled the place of a watchman who never slept on or left his post, and a fireman whose lungs are not affected by heat or smoke, and who is brought into action by the element he is watching and which he attacks and conquers in its puny infancy, and not when it has attained gigantic proportions.

The cotton, woolen, paper and rubber factories that burned down with alarming frequency and were shunned by fire underwriters have now become the most desirable risks, owing to the automatic sprinkler and improved methods of construction.

When these mills are equipped with sprinklers and maintained according to the high standard set by the New England Factory Mutual Insurance Companies and the Associated Stock Companies who insure sprinkled risks, their value cannot be questioned, and when from 65 to 95 per cent. of the premiums of insurance is returned to the assured each year it is useless to argue with them against automatic fire protecting devices.

But I can imagine many of you giving instances where buildings equipped with sprinklers have burned down, or where they failed to put out a small fire, or where they have opened without apparent cause and caused a heavy water

damage. All of this I grant; they will not put out a fire unless supplied with water; neither will a hydrant or a steam fire engine. That they have opened without cause in the past and caused large water damage I will not deny, but is this the only cause of excessive water damage? How often have you and I found buildings filled with smoke caused by a very little fire in an out-of-the-way corner where it could not be found and water far in excess of the needs of the fire poured into the building, where the water loss was from 75 to 100 per cent. greater than from fire; but such things cannot be avoided. Automatic sprinklers properly equipped, connected with a never-failing water supply and kept under frequent and rigid inspection will reduce the fire loss, the insurance rates and the expenses of the fire department. But they cannot be attached to our salt water system; they must be supplied from our fresh water mains, and the pressure therein is not sufficient for very high buildings.

The sky-scrapers must rely on the salt water system without the aid of the automatic sprinklers. How can this be done? Or can it be done at all?

I contend that the municipal authorities will have done their share when they furnish the street mains and service with sufficient water and pressure to reach the top of the highest buildings; the owners thereof should do the rest. I claim that fires in tall buildings can never be extinguished by streams played from the street, no matter how powerful they may be. I claim that lines of hose should not be taken from the street above the sixth or seventh stories; others may think the eighth or ninth stories should be the limit.

I would limit the height of buildings to the height that water could be carried to do effective fire duty. Above the fifth story, possibly the sixth, I would compel the owner to equip each floor with a system of perforated pipes or open sprinklers made of non-oxidizable metal, each floor to be supplied with one or more separate risers according to the area covered, the valves for controlling the flow of water to be operated from the street or the first floor of the building. When buildings are thus equipped I do not think outside stand-pipes are necessary, but if provided I would not use hose at any of the outlets; metal play-pipes with suitable joints so that they could be turned at any angle would I think be the proper thing.

Much has been said and written of the value of roof hydrants, but I believe they have been greatly overrated by some writers. They are of little or no value in controlling a fire in the building on which they are placed, for unless means of escape by the roofs of other buildings or by outside ladders to the ground was provided, it would be ex-

tremely dangerous to attempt to operate them with a fire burning underneath. But they would be of great value in preventing the spread of fire from other buildings, and they could be so arranged as to flood the roofs when flat and keep them cool, at the same time forming a water curtain on two sides of the building. I would equip the roofs of all tall buildings with them.

I can see that with the present plan of furnishing salt water some little time must be lost in getting water on to the fire after it has been discovered, as the alarm must be given and connections made to the pumps on the fireboat; again she may be absent from her dock, but when a second boat is provided that need not happen. The pressure in the pipes might be maintained at the maximum for a reasonable interval of time or until the boat could make connection by means of compressed air tanks placed near the end of the pipe, the air-compressor being located on the boat; in that case the water would be instantly available in our highest buildings and most fires extinguished before doing serious damage.

The salt water system should cover our entire business district as soon as possible, and when that is done reliance should not be placed on the fireboats; stationery pumping stations should be built, one on the harbor front and one on the Charles river. Then we would have water ready for instant use at all times at a pressure of 200 pounds, and with automatic regulators that pressure could be maintained at all times, the speed of the pumping being regulated by the flow of the water.

One objection may be raised to stationery pumping stations—the necessity of keeping fires banked under boilers; the necessity of keeping men on watch night and day to keep them in proper condition and to start fires and pumps and to keep everything in perfect order. Let me say to you that in and under Boston's streets we have hundreds, yes, thousands of horse power of electrical energy. We need not furnish these pumping stations with steam at all; electricity can be furnished so readily that steam can now be dispensed with. If need be that same fluid will start the pump and stop it. It would not be necessary even to give an alarm of fire if the Ames building, for instance, or any other tall building were equipped as indicated. If a fireman opens the valve and lets the water rush to the upper floor, the switch is turned and the motor moves, necessitating no watching day or night, but it will operate itself at all times.

At the fountain head is the generating station which gives us this power with sufficient dynamo capacity to respond to any call upon it, so that the time has come when no valid objection can be

raised to stationery pumping stations at the harbor front and on the banks of the Charles river.

I believe that is the way to protect our tall buildings in our narrow, crooked streets and alleys, and I believe the time will come when this plan will be adopted, and that our firemen will not be subjected to the strain they have been under for years back when the best fellows in the world go down to early graves owing to the noxious gases which they inhale going into sub-cellars and into the tenth stories on ladders covered with ice, where life is not worth a farthing and where a misstep will send them to eternity.

I believe that iron pipe and hydrants are cheaper than hose; the former will last as long as the average life of a man, while the latter must be replaced every three years. I believe that next to a gravity system there is nothing better than a direct pumping system of water for fire protection; the former Boston cannot secure, but the latter is within her reach; I believe that when this system is perfected fire department street patrol will be of real value, as the place for most of the men will be on the streets, not in the department houses, for fires in the highest buildings can be successfully attacked by a single fireman and possibly kept under control; I believe that the time will come when the appearance of steam fire engines on the streets of the business district will be as rare as that of the horse car or ancient omnibus, and I believe and hope that the advanced views herein set forth will provoke earnest discussion among fire department officials. I do not expect all of them to agree with me in what I have said, but as they know the existing conditions they must help to improve them.

WORK OF OHIO MUNICIPAL CODE COMMISSION.

BY EDWARD KIBLAR, NEWARK, O., A MEMBER OF THE COMMISSION.

Almost the last surviving argument which is now doing service against the success of popular institutions, is the alleged bad government of the cities of the United States. We are pointed to the prodigious municipal growth of the cities of Great Britain, and we are compelled to admit their superiority and to comment upon the paradoxical fact that as municipal government in that limited monarchy has been evolved, the more it seems to have approached the true democratic type; while, in the United States, the unmistakable tendency of municipal growth under existing conditions is toward the federal plan, or one man power, with the mayor the monarch of the municipal republic. The three reasons given for this anomalous difference are:

The property qualification of electors in Great Britain.

The absence of party politics in municipal affairs.

The uniform recognition of merit and fitness as the requisite qualification for holding office.

There can be no question that to some extent universal suffrage lowers the standard of electoral intelligence, and consequently the character of government; for under it, all except idiots and the insane may vote; so that so far as the ballot is concerned, the power wielded by the feeble minded inmate of the county infirmary is the equal of that exerted by the most intelligent citizen with large property interests at stake. While this seems unjust, I am convinced that the evil consequences of universal suffrage are greatly exaggerated and that we must look in other directions for the remedy for our municipal ills. The mere suggestion of a property qualification seems so hostile to our fundamental ideas of free government, that no reformer has had the temerity seriously to propose it. In my judgment, this evil becomes insignificant when contrasted with those which result from the complete control of municipal affairs by party politics and the almost total failure to make incumbency in office depend not upon party zeal or service, but upon fitness to perform the duties. The business interests of our cities have become too enormous any longer to be regarded by the average citizen as the legitimate spoils of party politics, and to rescue them from partisan control and to require that public affairs be managed only by those of ascertained fitness, can violate the spirit or letter of no law, constitutional or statutory, nor any principle dear to any lover of free institutions. Along these lines reformation may be achieved without any assault upon the foundation of free government. The truth is, that the evils of our municipal system are not the natural or necessary result of free institutions, but rather in consequence of the violation of that cardinal principle of the federal constitution, the policy of local self-government.

The particular difficulties that beset the municipalities of Ohio, and which, through the active aid of the Ohio State Board of Commerce, have culminated in an attempt by the last Legislature to provide a remedy, result from what the Supreme Court of Pennsylvania has aptly characterized as "Classification run mad."

Under a constitutional provision, couched in these very carefully selected and significant words, viz:

"The general assembly shall provide for the organization of cities and incorporated villages, by general laws, etc.," there has been provided by the various Ohio Legislatures a system of municipal

classification by which at present there are fourteen distinct classes of municipal corporations, viz: Three grades of first class cities, eight grades of second class cities, two classes of incorporated villages and hamlets—with legislation to a greater or less extent separate and distinct for each class. In the eleven classes of cities there is a special charter or distinct form of government for each class and grade. By this artificial and almost ridiculously arbitrary classification, Cincinnati is the only city in the first grade of the first class, Cleveland is the only city of the second grade of the first class, Toledo is the only city in the third grade of the first class, Columbus is the only city in the first grade of the second class, Dayton is the only city in the second grade of the second class, Springfield is the only city in the third grade of the second class, Hamilton is the only city in the third grade b of the second class, Portsmouth is the only city in the third grade c of the second class and Ashtabula is the only city in the fourth grade a of the second class. Should this enumeration not be accurate, my justification is, that the Supreme Court of Ohio has tacitly confessed its inability, under the present class legislation, in some cases satisfactorily to determine the proper classification of some of our cities. Had I the time, it would be profitable to point out what useless and perplexing differences at present exist between the forms of government in general and in detail of the various cities constituting the different classes.

It is sufficient to say that the constitutional requirement that municipal corporations shall be organized by general laws, is a dead letter! indeed, so thoroughly dead, as to amount at this day to a reminiscence.

Under the present holdings of the Supreme Court the right of the Legislature to legislate specially for each city in Ohio is firmly established, and notwithstanding the provision of the constitution it may give to each city a form of government different from the other, provided only that the law makers strictly adhere to the fiction of creating a special class for each city and of legislating for the class. Unless the Supreme Court should come to the conclusion that this line of decisions does not fairly interpret the language of the constitutional provision I have quoted, and upon reconsideration decide that the proper construction to be placed upon that language is, that the only classification permitted is into cities and villages, an amendment to the constitution is essential to correct the evil, unless the Legislature itself shall take the stand against any other than the constitutional classification. Many very able lawyers are of the opinion that the plain object and meaning of this language of the constitution is to designate the

classes of municipal corporations, close the doors against further classification and abolish special legislation.

By the act of the general assembly passed April 25th, 1898, a commission known as the municipal code commission was created to revise the laws relating to the cities and villages of this state, and to prepare a bill for the organization of cities and villages in Ohio under a plan which shall be uniform in its operation throughout the state, and in which there shall be a separation of the legislative and executive powers of the officers of municipal corporations.

Under authority of that act the Governor of Ohio has appointed a commission, which, since the first of August, 1898, has been engaged in this work of revision. I have been invited to address you upon the work of this commission, and in what I shall say, I wish it understood that at this time the work is in no sense completed nor has any feature of the bill been finally determined upon or settled, but it is my purpose simply to indicate to you what conclusions have so far been reached by the commission, what difficulties have presented themselves, and to say that these conclusions, by further consideration of these subjects, are all subject to modification or change.

A careful study of the various symptoms of the municipal malady has convinced the commission that the medicine most needed is an allopathic dose of home rule. Under the present system there is in the broader sense really very little self-government in the cities of the state. They are managed, not by themselves, but largely by the Legislature. This policy is utterly mischievous and wrong. Nobody can conceive of a good reason why the member from Licking county should be called upon to determine what governmental powers of those granted the cities of Cincinnati or Cleveland shall exercise or when or in what manner it shall be done or have a vote or voice in determining what subordinate offices shall be created to transact the business of the city governments or what duties or salaries shall be attached to those offices, leaving to the city itself no controlling voice in the settlement of these matters. Neither of the cities named is the constituency of the member from Licking, nor has his own constituency the slightest interest in holding him responsible for the part he plays in managing the internal affairs or determining the policy of the government of Cincinnati.

As a matter of fact, we find that as a legislative control of local municipal affairs increases, the number of municipal classes multiplies in such a manner as irresistibly to suggest that the evil of classification results from that other evil, legislative control of municipal government. Therefore, the commission

maintains that under home rule, and without legislative government, any further classification of municipalities other than the strict classification of the constitution into cities and villages, would be not only disadvantageous, but useless. Indeed, as we view it, classification is simply a device to evade the constitution and to render legislative control practicable.

The time has come fairly and fully to try the experiment of local self-government for cities, and by the bill prepared by the commission, the Legislature will be earnestly invited to relieve itself of the burdensome task of managing the details of municipal affairs and so far as possible leave to the people of each city respectively the exclusive management, direction and control of its local policy and administration.

While to permit each city of a metropolitan class to frame its own charter and determine what powers of local self-government shall be exercised, would require an amendment to the constitution, the Legislature may safely grant to the municipalities a large measure of power, leaving it to each to exercise such of the powers granted as its local needs may require.

Therefore, instead of sections 1,546 to 1,550 inclusive, in the present revised statutes, the commission will recommend as a substitute a single section in some such language as follows:

"Municipal corporations are divided into cities and incorporated villages, and there shall be no other classification of them, nor shall there be any division of those classes or either of them into grades."

The commission is satisfied that the adoption of the policy of home rule and the committing into the hands of each city the management and control of its internal affairs will remove many of the obstacles which at first blush seem insurmountable to the abolition of the classification of cities.

A difficulty which is inherent in the situation itself, and which does not grow out of the abolition of city classification, is to determine the true dividing line between cities and incorporated villages. Population is not the true principle of division. Without reference solely to population, a community which has assumed metropolitan functions by the establishment of a paid police force, paid fire department, a sewerage system, paved streets, street railways, water works, gas or electric lighting, public libraries, parks and the like, it seems should be entitled to the machinery and privileges of city government and should ipso facto, and without reference to the sentiment of the community, be taken out of the class of villages. Exactly how to embody this idea in concise statutory language is one of the difficulties which this commission has as yet been unable

to solve. Should the commission be driven to base the distinction upon population alone, what number of inhabitants would most nearly approximate the true division upon the principle above indicated?

Greater than the need of the abolition of classes, and the uniformity of legislation, and as a *sine qua non* of home rule, in the judgment of the commission, a complete and comprehensive merit system of appointments is essential to municipal convalescence. The commission will earnestly recommend to the Legislature for adoption a compulsory merit system of appointment, applicable to the employment and removal of every city officer or employe, whose employment and removal shall be controlled by reasonable and practicable tests of fitness and by no other consideration. The system will not apply to those elected by the people, or appointed by the council, judges and clerks of election, members of the board of education, superintendent and teachers of the public schools, the heads of the principal departments or the members of the law department.

The commission regards the adoption of such a system as essential to the success of the experiment of local self-government, and believes that there are few intelligent people in Ohio, and no politicians who have any regard for the public weal, who are opposed to the principle of the selection and retention of public servants by the test of ascertained merit.

The commission will recommend the federal plan as the general form of city government giving the mayor the power to appoint the heads of the departments without the confirmation of the council, and the power to remove them by giving to the council his reasons in writing therefor, thus placing the whole executive power of the city with the mayor and with the heads of departments, and giving to the council no executive, but exclusively legislative powers. To give the mayor this power, and to place upon him in this way the sole responsibility of the administrative business of the city is essential to render effective the separation of these two departments in the manner directed by the act creating this commission. There will be four administrative departments recommended; the department of accounts; the department of law; the department of public safety, which shall embrace the police department, food inspection, public health, fire department, cemeteries, penal, charitable and reformatory institutions, under which there may be a superintendent of police, superintendent of fire department, superintendent of health and charities; the department of public improvements, which shall embrace the supply and distribution of water, care, improvement, repair and

cleaning of streets, construction of sewers, public lighting, public buildings, in which department the council may by ordinance provide for a superintendent of water works, superintendent of streets, chief civil engineer, and superintendent of parks.

Whether it is economically practicable to attempt to separate the legislative and executive departments of the village government or to disturb, as little as possible, the present government of villages under which all officers are elected by the people, are questions not yet determined by the commission.

Under the ordinary form of municipal government at present, the people in general have little interest in the public service, because the single avenue which leads to it is through the portal of party politics, and it seems that only those are eligible who have taken the requisite number of degrees; and likewise under the present form of divided responsibility between the council and the executive officers, the people are unable so to locate the responsibility for the failure of municipal government as to make their ballot effective in the direction of reform. The inevitable effect of a proper merit system of appointments, and of the unmistakable location of responsibility for administrative mismanagement is to stimulate in the public generally the liveliest interest in municipal government and affairs.

A difficult problem satisfactorily to determine is the constitution of the city council. The commission is in favor of requiring city councilmen to give bond to the city for the faithful performance of their duties, and to be paid a salary, which with all other salaries of city officers and employes shall be determined by the council. By relieving this body of all executive duties, and confining its business to what is strictly legislative, there seems to be no necessity for having a large council with a consequent heavy burden of salaries. Experience is demonstrating that the election of councilmen at large attracts a much better class of men than ward representation. The commission is inclined to recommend that the council in each city shall consist of seven men; three to be elected by the city at large, and one from each of four equal councilmanic districts into which the city shall be divided, electing the councilmen at large and the district councilmen in alternate years.

Under existing conditions, the commission is not in favor of municipalities embarking in the ownership, operation or control of street railways, and, in general, doubts the wisdom of municipal ownership and operation of water works, gas works, electric light and power, telephones and the like, for the sole reason that nothing but financial disaster can be expected as the result of the political

control of such vast business interests. It is greatly to be deplored that the municipalities of Ohio did not long ago adopt the policy of managing their affairs upon business principles, so that these vast revenue producing functions might now be utilized for the public good. They belong to the public, and it seems little less than a legal crime that private corporations and not the community should reap the profit, or in other words, that upon the community should be imposed excessive rates from which the people receive no corresponding benefit. These public services, if owned and properly managed by each municipality, can be made to yield an immense public revenue, resulting in the supply, at greatly reduced cost to each community, of transportation facilities, water, gas, electricity, power, telephonic communication and the like, inevitably resulting in the reduction of taxation. Until a proper merit system of appointments shall be so imbedded in the statutory law of Ohio, as to have the force of a constitutional provision, the commission believes municipal extension in these directions should be viewed with apprehension. However, the commission will recommend that no ordinance granting any franchise for these purposes or for municipal ownership of any of the revenue producing utilities, such as water supply, gas, electricity and the like, shall be valid or effective until submitted to a vote of the people at a general municipal election where it must receive the affirmative vote of a majority of those who vote upon the proposition; thus, in these matters, giving to the people, not the mayor, the veto power; and it has occurred to the commission that it might be wholesome to extend this popular veto to all ordinances fixing salaries. It will be recommended that no franchise be granted for more than twenty-one years, and that in addition to any other form of compensation which the council shall exact, the grantee of each franchise shall be required to pay annually to the city a definite sum of money based upon the gross receipts of the business; that upon the expiration of the franchise, the plant and all property connected therewith may become the property of the city upon a fair valuation, exclusive of good will, value of franchise, or value of plant based on earning power; that every such plant shall provide a means of forfeiture by the council to secure efficiency of public service at reasonable rates; that no franchise of any kind be renewed or extended unless within eighteen months of its expiration, and that extensions of existing franchises to new streets shall be made to expire with the expiration of the franchise on the main system.

Among the measures which will be submitted to the Legislature for adoption will be statutes upon the following subjects:

Giving each city the right to recover back from the person who receives the same, and from the councilmen who voted in favor thereof, any illegal expenditure of money, making it the duty of the city solicitor or director of law, under section 1,777, as revised, to bring suit to recover it back; providing, that in such suit it shall be a defense available to such councilmen to allege and prove that previous to the vote the city solicitor in writing pronounced the expenditure legal, in which case the solicitor shall be liable:

Making it unlawful to use or occupy, as appurtenant to any building, any part of any street or sidewalk or space above or below the same, by erecting or maintaining any stairway, cellarway, sign board, bay window and the like, without permission of the council, and without paying an annual rental to be fixed by general ordinance, the same to be a lien on the property; the council to have the right to prohibit all future or remove all such existing obstructions:

The advancement of villages to cities by proclamation of the Governor:

Requiring that all wards be in rectangular form, so far as practicable, and prohibiting any change that effects a gerrymander of territory, or which does not more nearly equalize the number of inhabitants in the several wards:

The abolition of all special elections and the filling of all official vacancies by appointment:

Giving to the mayors of all cities the veto power as to the expenditure of money, approval of a contract for the payment of money, for purchase, sale, lease or transfer of property, or creating a right, or levying any tax, or fixing the rents to be charged for the supply of water, or imposing any fine, penalty, or forfeiture:

Requiring every city to make a report yearly to the auditor of state, to be by him submitted to the Legislature, containing an accurate statement of the financial receipts of each city from all sources, expenditures for all purposes, with a detailed statement of the debt and of the purposes for which created. A report shall also be required from each city as to each franchise operated under a grant made to a public service company where compensation is paid for such service wholly or in part by the users thereof, showing the entire cost of construction, equipment, maintenance and operation; the amount collected annually from users and the character and extent of the service rendered and the amount of the cost collected annually by taxation, and the character and extent of the service rendered the city in consideration thereof.

Manifestly the object of holding municipal elections in the spring, separate from national and state elections in the fall, was an attempt to divorce

municipal affairs from partisan politics, and, except from the standpoint of the politician for revenue only, it is difficult to see why there should be any party nominations or party candidate for any municipal office, or to understand how opinions upon the tariff, for instance, can really affect the qualifications of a candidate for the office of mayor or city councilman. The commission has been soliciting the opinion of a great many people upon the wisdom of a change in the municipal election law, by which a candidate for mayor and the council may be put in nomination by the petition of, say ten electors, and requiring that the names of all candidates for municipal offices shall be printed upon the official ballot under the name of the office, without any party or other designation. While this would not prevent any political party from endorsing the candidacy of any one of the nominees for office, it would encourage the voter at municipal elections to discriminate between the men and their fitness, rather than between political parties merely. It seems that such a provision of the law would be simply carrying out the original intention of the Legislature in separating, as far as possible, the times for holding the municipal and the state elections.

While it may appear to many that thus to strip the municipal ballot of its pronounced political livery would be a violation of one of the ten commandments of American politics, yet as the commission views it, this ballot reform, municipal home rule and the merit system of appointments and removals are equally essential to arouse in the people generally a permanent and lively interest in municipal affairs, without which good government is impossible.

This commission realizes that no perfect form of government will of itself make good government; that no bad form of government, if managed by good men, will inevitably produce bad government, and that without reference to the form, no government can be satisfactorily administered unless its controlling spirits be men who are experienced, capable and honest, and we believe that the inevitable effect of awakening in the masses of the people an abiding concern in every detail of municipal administration will be to bring and keep to the front the men best qualified by capacity and honesty to manage public affairs and to render unto the people, to whom alone they belong, the just profits of municipal industrialism.

PUBLIC OWNERSHIP OF LIGHTING PLANT.

BY GEORGE E. WARNER, MAYOR, ROCHESTER, N. Y.

Rochester is one of the best lighted cities in this country. In fact, there are but few cities in other countries that

surpass our beautiful city in this respect. As a result, however, we are compelled to raise each year by taxation a large sum to pay the expense of this lighting.

The official reports of the Common Council show that it cost us for street lighting for the year ending March 31, 1893, \$163,574.83, while for the present year the cost will be at least \$240,000, and may reach \$245,000; an increase since 1893 of \$76,426.

At the same rate of increase our street lighting at the end of the next six years will cost \$316,426. In addition to what we pay for street lighting, we pay from \$5,000 to \$7,000, if not more, for lighting our public buildings. It will, therefore, be readily observed that we are paying a large amount for lighting purposes. If this expense can be reduced, and the city have as good service, it would seem as if it were our duty to take steps looking toward such reduction.

We have but one company having ample facilities for lighting our entire city. The result is that when our contract for lighting is about to expire we go through the formality of soliciting bids, knowing well that we can expect to receive but one bid for this kind of lighting. This results in giving to one company a monopoly of our lighting.

In justice to the company, I would say that we have good service at a cost considerably less than that paid by some cities. Our present contract is for five years, and was made July 1, 1897. Under the contract the company owns the conduits, poles and wires, and it agrees to build a certain amount of conduits each year, and indemnifies the city from all damages on account of the operation of the system.

At the beginning of this year we had in operation the following lamps: Single arc, 2,232, 25 cents each; incandescent arc, 338, 20 cents each; gas lamps, 167, 8 cents each.

An arc light costs \$91.25 per year for 2,000 candle power light burning all night. We deduct for all outages that are observed, but those last month amounted to only \$80.

By reason of the number of our shade trees, we do not receive the full benefit from our lights. A judicious trimming of the trees throughout the city would result in a great benefit.

The two lights on one pole is not a good financial investment. The two cost 40 cents per night. One costs 25 cents a night. They beautify and adorn our avenues and streets, but by reason of the kind of globe used we do not receive much more light from the two than we received from one arc light with the plain globe. I know this from experience.

The question presented is, Will our expense be reduced if we should own a plant? An argument advanced against

municipal ownership is that it is a step toward Socialism. I am not prepared to say whether or not this is so, nor do I think it material to the issue. I have become convinced that this is a proper policy for municipal corporations to pursue. I think that it is a proper step to make now, and that the experience of every city and village in the country which has tried it fairly justifies the movement. If the public ownership of the electric lighting system of this city will prove a public benefit, the fact that the Socialists favor it cannot make it otherwise. To make this step does not bind the city to make another one in the same direction unless it be necessary for the public good. We should not be afraid of a name. If municipal ownership is a good thing, and it also is a plank in the Socialist platform, there is no harm in admitting that there is at least one sound plank there.

I am in favor of ownership and operation by the city of all the public service conveniences which the experience of other cities has shown to be practicable and beneficial. I am not in favor of experiments. I would not favor such a policy in a new field. But when we know that private persons are accumulating wealth by administering the blessings of civilization and government to the people, it is time for the people to declare that all the rewards of civilization and government belong to them.

Able men have tried to point out what the city should own and operate and what it should leave to private persons, but I am not aware that any of them have accomplished that result even to his own satisfaction. It is a difficult question to answer, and I shall not attempt it. It is certain that the functions of the city government have enlarged to meet the demands of the people. The movement in the direction of government control has been gradual and deliberate and has proven in nearly every case to be wise. We seldom hear of a city or village which has once assumed control of some public convenience abandoning it, while we are constantly hearing of other cities and villages assuming it.

It is no longer disputed that the practice of granting franchises without compensation is all wrong, but the question as to what is the best way to avoid this is not yet settled. It is claimed that the best results may be obtained by selling the franchises by the bidding system. But wherever this has been in vogue it has proven a field for corruption. Money is one of the most corrupting elements in our politics, and when a legislative body has the power to sell a franchise, a corporation would consider it a good investment to buy the legislators. This evil cannot exist with municipal ownership. Public ownership is not a novelty. The King's highway of

England is an old establishment. If this city should attempt to sell its water system now in use there would be an outcry. Yet its ownership by the city is called a species of Socialism. Public ownership of the streets, parks and sewers is the same thing. Where shall we stop? I think it is idle to answer the question so long as there is left anything, the public ownership of which would be beneficial to the people. When it shall appear that the faults of a proposed policy outweigh its merits, it will be time enough to stop.

It is asserted that such a system would be used by politicians to promote their own interests, and that this would destroy its efficacy. This would appear to be true, considering the corrupt state of our politics, were it no disproved by the facts and experience. The postal system of the United States disproves the assertion. The safe delivery to our friends and people with whom we have business relations of private messages and important papers would seem to be the last function which the government should undertake, and one presenting every opportunity for fraud and political tinkering; but with the almost faultless system of Civil Service regulations in force and in consequence the business system prevailing, this department has become one of the best managed and most efficient of the government.

There is another fact to be considered in this connection. Whenever extravagance prevails in a department of the city, the citizens become aware of it either on account of the increased taxes or increased rates for the commodity used. This will call forth an explanation of the waste, and the people can prevent it; but with private persons in control, the profits might reach an enormous figure and the taxpayers and consumers would be tied down to the old rates and would remain entirely ignorant of the profits. If the people are to be cheated either by private persons or by their own servants, it is more easy to prevent it in the latter.

Under municipal ownership of the street railroads, we would have no strikes, because the people, being in the business not for the greatest profit, but for the greatest good, could afford to pay its laborers better wages than private persons could.

No complaint is made of the manner in which our water works system is conducted, and the water is of excellent quality and the rates are reasonable. If the question should be submitted to the people whether we should sell our water works system to a private corporation and allow it to supply our city with water, or whether it should remain under the control of the city, the result would be without doubt in favor of municipal ownership and control.

In endeavoring to determine the cost to

a city of a public lighting plant, the following losses must be taken into consideration: Interest on the investment, depreciation of the plant and machinery, taxes on the assessed valuation of the private plant.

I have collected from a table of statistics of contract electric lighting on all-night schedules the following places showing the cost for private lighting per arc lamp per year, 2,000 candle power, to several of the principal cities in the country, viz.:

Ashland, Pa	\$115 00
Baltimore, Md.	127 00
Buffalo, N. Y.	100 00
Dayton, Ohio	100 00
East St. Louis, Mo.	110 00
Fargo, N. D.	120 00
Omaha, Neb.	110 00
Providence, R. I.	127 00
Huntington, W. Va.	100 00
Trinidad, Col.	132 00

Of course, there are many cities in the country lighted much cheaper by private contract than those I have above quoted; but after comparing the places above with the estimated cost of running public plants, I think it will be invariably seen that even the most expensive public plants cost the cities less than if they were operated by private persons.

The difficulty found in comparing the figures given as to the cost to other cities with the amount we pay is found in the fact that they do not all state what the candle power furnished is, or whether it is for an all-night schedule, or what is called a moonlight schedule. They do not all figure as a part of the cost of the items of interest on the capital invested the amount of taxes which would be received if the enterprise was in the ownership of a private company, or the depreciation in the value of the plant. An accurate comparison cannot, therefore, be made. These figures only show in a general way that the lights are cheaper when the plant is the city's, and that the cities and villages having them are fairly well satisfied with them.

It will be found that the places in which coal is the cheapest the best results are obtained. Coal, therefore, is an important factor in reducing or increasing the cost.

It will also be found that a city or village which is able to operate its water system in connection with its electric plant will be more able to furnish electricity at a lower rate than those where the two systems are not combined.

It can readily be observed that a great many things are to be considered in figuring out the operating expenses.

Let us take Detroit as a city which we may compare with ours, the candle power furnished and the schedule being the same. It is the largest city in the country owning and operating its lighting plant. Its population is now about 365,000, and its area 29 square miles. Our

population is 175,000, and area 18 square miles. Detroit maintains 1,842 arc lamps and about 3,000 incandescent lamps in its public buildings. The plant is in charge of a commission; and has been operated in all its details since November, 1897. The last report of the commission says that the period is entirely too short to justify absolute conclusions as to the success of its operation from an economical point of view. The commission figures the cost to the city per arc lamp at \$83.50 per year, and estimates that the probable price which would have to be paid a private corporation for lighting would be \$90 a year, and considers that in the short period which it has been in operation the plant has saved the city a little less than \$7 on each light per year; and it further says that the quality of the light was up to the full standard, 2,000 candle power, and also that collateral advantages not easily reducible to terms of pecuniary value have accrued to the city.

As our lights cost \$91.25 a year, we would save, provided we could do no better than Detroit, \$7.75 a year on each light, or \$19,840 a year.

I am informed that the records of the Detroit commissioners show that (since June, 1898, the date of the last report) there has been a still larger reduction in the operating expenses, and a consequent reduction in the cost per light.

In my opinion, we should be able to save as much, if not more, than Detroit on our street lighting, and also have the public buildings lighted free of expense.

It is evident from a reading of the report of the Detroit commission that the operating expenses will be reduced in 1898 over that of 1897, by reason of the fact that the plant was conducted according to business principles, resulting in a large saving.

The serious question for us to consider is, Would our plant be conducted on business principles, with an eye only to the public welfare? Would the interests of the people be taken care of, or would it be managed for the benefit of the politicians and their friends? If it should be managed and controlled for political purposes only; if places should be filled, not according to merit, but simply as a reward for party service; if three men should be employed to do the work two men could do; if larger salaries should be paid than necessary; then it is apparent that a municipal plant would be detrimental to the city, and that instead of there being a decrease in the cost of our lighting, there would, in all probability, be an increase.

If, on the other hand, our plant could be conducted on business principles; if economy should prevail; if men were to be hired according to merit; if they should know that their places depended, not on politics, but upon the results of their own work; then we could pay them

good wages and at the same time save a large sum to the city.

I do not believe that it is possible for a municipal corporation to conduct its affairs as cheaply as a private person. There is not as a general rule, the same watchful care displayed by officers of a municipal corporation as by a private person.

That savings may be made by municipal corporations is evident from the fact that the operating expenses of our water works was less by a considerable sum last year than for several years.

Comparing our city with Detroit, I should say a plant could be established here for \$400,000. Detroit allows 4 per cent. interest on its bonds. Ours would sell for $3\frac{1}{2}$ and yield a premium of \$25,000, judging from the recent sale of park bonds.

The amount allowed for depreciation varies from 2 to 7 per cent. of the investment, one writer on the subject claiming as high as 10 per cent. It is evident that 10 per cent. is too high, as the entire plant would not have to be replaced in ten years. Detroit fixes the amount at 3 per cent., and this is also the percentage allowed by several private companies.

Municipal plants can be built cheaper and better now than a few years ago, as we can bring to our aid the experiences of other cities and villages in their operation of plants. We could start with all the wonderful improvements made in electric lighting in the past few years.

Thousands of dollars are expended annually by every city in the country for its public printing, usually without allowing business considerations to enter into the question. It is usually given to the organ of the party in power as a reward for its support. A large amount of money is spent each year in printing the various proceedings of the boards of this city, reports and notices. The proceedings, reports, pamphlets and notices of all kinds might be readily and economically printed by the city; and I see no reason why a sheet or small paper might not be issued weekly containing official proceedings and notices.

Newspapers are run for profit by corporations that seldom care to lose a dollar by honest criticism. Deprive them all of the political pap, very often hush money, and we shall have removed one of the greatest causes of corruption in city politics.

We want no party organs in municipal politics. The declared intent of the constitution of 1894 was to abolish party lines as far as possible in municipal campaigns, and as a step in that direction it provided for the holding of municipal and state elections in different years.

Some of the newspapers of this city have told enough falsehoods about city affairs within the last three years to condemn their souls, if they had any, to eternal punishment. Many people rely

on the newspapers for news and discussions of city affairs, and it is hardly practicable for them to do otherwise; but they will never get honest accounts of the actions of their servants as long as the law sanctions the buying of made-to-order criticisms.

The city of Boston a short time ago established a municipal printing plant which is a great success. I have in my possession one of the city's annual reports, which is as neat and business-like as any I have seen. Mayor Quincy, in transmitting a report of a committee appointed by him to investigate its conduct, says: "The Superintendent of Printing is entitled to great credit for the excellent financial standing which the plant has made during the first six months of its operation, particularly in view of the difficulties which are necessarily encountered in organizing a new establishment and getting it into successful running order." His committee says: "We find the result of six months' operation of the plant to have been a profit to the city of \$6,360.16."

Our city will not be alone in any movement for municipal ownership. At the last convention of Mayors in Detroit the sentiment was largely in favor of it. Nearly all the annual addresses of the Mayors which I have seen recently advocate it in some form or other. Mayor McGuire of Syracuse advocates a public lighting plant and lodging houses for the poor.

Mayor Phelan of San Francisco, after mentioning some difficulties to be overcome in regard to the city's lighting and water, says:

"The true solution of these questions, both of water and artificial light, is to be found in the construction and operation of a plant by the city, furnishing the people these prime necessities of civilized life at the lowest possible rates. Civil service reform and city ownership not only will give better service at lower cost, but it will eliminate from the City Hall the constant presence of a corrupting power, and will enlist in the cause of good municipal government those citizens, otherwise worthy, who, as directors, stockholders and managers of quasi-public corporations, selfishly, if not criminally, encourage or connive at fraud and rascality. Were their interests not one with the boodlers and the bosses, their services as intelligent business men would no doubt be given to the community."

—The annual report of W. H. Swindell, superintendent of lamps, Baltimore, Md., shows that street lighting in that city during the last year cost a total sum of \$399,550.19, which was \$15,931.81 less than the amount appropriated. There are now in service 1,369 electric arc lamps, 6,235 gas lamps and 1,072 gasoline lamps.

—The partnership of Crellin & Lovell, civil and consulting engineers, Des Moines, Iowa, has been dissolved by mutual consent. The business will be continued by W. D. Lovell, and all interested parties may address him in matters relating to the business of the firm.

—The contract for laying the asphalt bicycle strips on Borden, Jackson and Thomson avenues, 8,280 square yards, has been awarded to the Compagnie Generale Des Asphaltes De France, Ltd. The only contract for asphalt pavement awarded in the Greater New York last year was the work done by this company at the Fifth Avenue Plaza, Fifty-eighth and Fifty-ninth streets, which was surfaced with the natural rock asphalt from the company's mines at Seysel, France, and Ragusa, Sicily. Among other contracts recently awarded to this company are Claiborne and Rampart streets, New Orleans, and Rue du Cloitre, Notre Dame, Paris, along the venerable cathedral of that name. The United States government has been using Seysel asphalt mastic very extensively in fortifications and the demand for its use in schools, warehouses and breweries has been very large. The new Ohio state capitol, Columbus is to be roofed with this material, and the Union depot at Terre Haute, Ind., is having the platforms laid with the company's mastic. The driveways in the Philadelphia public buildings have been laid with the company's compressed asphalt, and the same material is to be laid during the year at Fairmount Park, Philadelphia.

—Chief Kellogg, of the fire department of Spokane, Wash., has just had a very unusual honor conferred upon him. Under the rule which provides that the chief of the fire department of Spokane cannot be over 60 years of age, Mr. Kellogg would have been retired at the end of last month. Without being solicited by the chief or any of his friends, the Board of Civil Service Commissioners passed a resolution raising the age limit of the chief to 64 years, thus giving Mr. Kellogg four more years of active service.

CEMENT WALKS ARE PREFERABLE.

Regarding the respective merits of wooden and cement sidewalks, the city engineer of St. Paul, L. W. Rundlett, in his annual report takes a decided stand for cement. They are declared to be cheaper to the property owners in the end. As showing the advantage of cement over wood it is cited that there are 321 miles of wooden walks and ninety-one miles of cement. There were expended on repairs for wooden walks a total of \$11,136.44, besides \$4,469.78 have been recovered because of personal injuries. Besides this \$1,093.25 was spent inspecting the sidewalks, most of the work being chargeable to the wooden walks. The repairs to the cement walks cost but \$404.16.

PEORIA, ILLINOIS.

This charming city of the middle west, for beauty, enterprise, and public buildings will be hard to beat. Among the latter, the new city hall, just completed at an expense of \$239,000, for architecture, finish, completeness and adaptation to existing needs, cannot be excelled throughout the country. This achievement has been made possible by the energetic efforts of Peoria's popular mayor.



HON. JOHN WARNER, MAYOR,
PEORIA.

John Warner, Mayor of Peoria, is now serving on his eighth term as the city's chief executive—a record that is almost unprecedented in the annals of municipalities. Mr. Warner was born in Perry county, Ohio, October 11th, 1833, his father, John B. Warner, being a native of Maryland and his mother, Getty Gordon, a native of Pennsylvania. He was raised and educated in Muskingum county, Ohio, and came to Illinois with his parents in 1846, settling in the city of Peoria, where he has ever since resided. From 1852 until 1859 he was engaged in the clothing and furnishing business, and from the latter date until 1862 dealt extensively in ice and owned and managed several fine steamboats, which carried on a large business between Peoria and New Orleans. Later Mr. Warner was elected colonel of the

108th Illinois Volunteer Infantry, and served with his regiment eighteen months, taking part with it in many severe encounters, among them Chickasaw Bayou, Arkansas Post, Vickburg and many others. After his return to Peoria Colonel Warner spent two years in the revenue service, and then obtained an interest in the wholesale and retail liquor firm of Spier & Co., which he retained until 1874, in which year he was elected mayor. Since this administration Col. Warner has been the success-

ful candidate of the Democrats eight times, and the expression applied to him, "the best mayor Peoria ever had," has become proverbial. In addition to being a prudent and economical executive, Colonel Warner is enterprising and progressive, and does not hesitate to press Peoria's claims for recognition as one of the leading manufacturing cities of the nation constantly to the front.

Marshal Moeller is one of the oldest fireman, if not the oldest, in the State. He began with the "volunteers" way back in 1862, and it was due to his rigid discipline and enthusiastic example that in 1878 the company of old hand engine No. 4 won the state and national prizes at the annual tournament in Chicago that year. He has been chief of the department since 1887. It is through



CARL MOELLER, FIRE MARSHAL,
PEORIA.

his efforts that the fine corps of men has been enlisted in the service and the department brought to the enviable position of second to none in the state of Illinois.

Superintendent John W. White has been at the head of the police force during this last term of Mayor Warner. Although not provided with the latest improvements which have much to do with the effectiveness of this department, yet he has steadily improved the service and made it the most successful in the history of the city. Still his ambition is not satisfied and he is aiming at greater achievements which may be brought to pass when a more liberal appropriation enables him to add the Beterillon system for the identification of criminals, and to increase the number of patrolmen to the regulation number—one for every thousand in population.

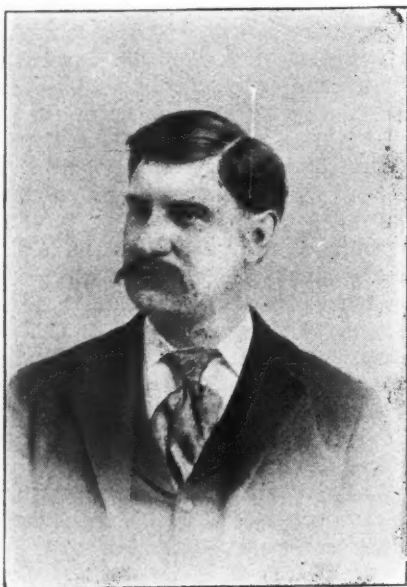
The efforts of the superintendent have been ably seconded by the assistance of Captain Frank Kleinchenz and Sergeant Charles P. Sloan. The latter is the oldest man of the force since 1876. J. W. Ingram, patrol operator, has also been an important factor in the success of the department.

The wise provisions for beautifying the city, installing a perfect system of sewers, obtaining and maintaining well paved streets have been made through the able and discreet management of Almon D. Thompson, city engineer of Peoria, which position he has held since 1895. Mr. Thompson took his C. E. degree at the University of Illinois, campaign, in 1893. The thoroughness with which he takes hold of the affairs of his department, the general interest he manifests in his profession by contribu-



ALMON D. THOMSON, CITY ENGINEER, PEORIA.

tions of valuable conclusions in carefully prepared articles in the leading engineering journals all point to him as one of the growing young men of the West who is bound to rise far above the average of his profession.



GEORGE B. SUCHER, POLICE MAGISTRATE, PEORIA.

The duties of police magistrate of the city of Peoria have never been more successfully discharged than by the present incumbent, Mr. George B. Sucher, who has officiated in the city court since 1895, when he was elected by a handsome majority. Graduating from Knox College, Galesburg, Ill., in 1889, he has put into the practice of his profession the sturdy principles of his Alma Mater and rapidly risen in his profession. He will stand for re-election at the expiration of his present term of office and will no doubt be returned for another term.



L. J. LIEBENSTEIN, CITY COLLECTOR, PEORIA.

No city official has shown more originality or painstaking effort to discharge his duties faithfully than the city collector, Mr. Liebenstein. He was elected to the office and began his duties in 1897. A number of reforms in the administration of his department, not the least of which is the introduction of the first cash-book and a simple but adequate system of keeping accounts which cannot fail to bring merited success.

PARKS.

Peoria has an independent park system known as the Pleasure Driving and Park District. It is maintained wholly independent from the city government under a special act of the Legislature and successfully managed by a board of commissioners, of which Mr. E. J. Darst is president and B. F. Cartwright is secretary.

As shown by the last annual report this small city of the West has developed a park system in four short years of which a larger and older city might be envious. Up to date it has four large parks with a total acreage of 334 acres which, with extensive improvements have cost \$350,000.

Mr. W. D. Meisser is the competent comptroller of the city of Peoria. A more thorough and painstaking city official it would be difficult to find. Should he not succeed himself at the expiration of his present term of office it might be looked upon in the nature of a calamity.

Mr. M. W. Manning is at the head of the department of public works, having been appointed by Mayor Warner in 1897. The present successful administration of his department has been possible by a long and faithful public service of other departments. He is ably

assisted by Mr. James A. Ryan, superintendent of streets, and Mr. George A. Ditewig, superintendent of sewers.

COURSE OF MUNICIPAL LECTURES.

Some of the public spirited citizens of Springfield, Ohio, early last fall provided for a course of six lectures upon British Municipal Life, under the auspices of the Chicago University. The course embraces the following subjects: "Municipal Economics," "Municipal Hygiene," "Municipal Social Life," "Municipal Beauty," "Municipal Education" and "Municipal Morals." The lectures are delivered by Professor Charles Zueblin, of Chicago University, and the course will be finished this month.

MUNICIPAL GAS AT SEVENTY-FIVE CENTS.

Danville, Va., with its own gas plant, proposes to sell gas to private consumers at a net price of seventy-five cents per thousand feet after April 1 next. On the strength of the showing made by the municipal water, gas and electric light departments last year, the light committee of the council recommends that the price of gas be reduced to \$1 per thousand feet, with a discount of 25 per cent. on all bills paid on or before the 5th of each month.

STREET CAR VESTIBULE ORDINANCE.

The Louisville, Ky., council has adopted an ordinance requiring all street railways in that city, beginning with January, 1900, to provide protecting vestibules for motormen, between November 1 and April 1 of each year. A fine of from \$20 to \$100 for each violation for each car for each day is provided, the fine to be imposed upon the president or directors of the company guilty of the violation. It also provides that where a car not supplied with a vestibule in season is observed by a policeman, he may send it back to the barn.

COST OF STREET SWEEPING IN ST. PAUL.

The annual report of City Engineer Rundlett, of St. Paul, Minn., says: "At the beginning of the year 1898 there were 10.5 miles of asphalt paved streets in St. Paul. This was increased to 11.9, all of which was swept by hand. A sweeper is given a certain amount of street, ranging from seventy feet to half a mile and depending upon the amount of dirt to be removed. The season began with forty-five men employed, and ended with forty-nine working. The actual cost of the sweeping is closely estimated to have been \$32.14 per mile per week."

OHIO WATER DEPARTMENT STATISTICS.

Through the courtesy of Mr. John P. Brennan, a leading member of the Urbana, Ohio, city council, "City Government" is enabled to present a valuable table of statistics concerning the water supply in many of Ohio's cities as served by private companies.

As a member of the committee on water works, Mr. Brennan has been thorough and enthusiastic in his investigations in the field, sparing neither labor nor expense. He has found that more than 70 per cent. of the cities of Ohio of 5,000 population or over own their plants. While politics makes municipal ownership more expensive to the city in some instances, because of a non-business-like administration, he has found, in the majority of cases of municipal ownership, the service more to the advantage of the city and the consumer than where the plant is owned by a private corporation.

tricity, rather than a high voltage, is essential. Usually about 250 amperes, equivalent to about 15 horse power, is the volume required, with a voltage of about 50. This makes a current less harmless even than that which produces incandescent lights. No harm can possibly befall either pipes or persons from contact with such a current. The thawing can be done equally well in either lead or iron pipes. The pipe when electrified is scarcely warm to the touch, and is in fact heated to only about 60 degrees."

PUBLIC BATH HOUSE FOR ALBANY.

The erection of a public bath house has been under discussion by the Common Council at Albany, N. Y., since early last summer. A site has finally been purchased on the east side of Broadway, between Orange and Quackenbush streets, and plans for the house are now being prepared. The bath

—A consolidation of the gas companies of Buffalo, N. Y., has put an end to 50-cent gas in that city. The net rate to all consumers has been restored to \$1 per thousand feet.

—Joseph Michaelson has been appointed city engineer of Geneva, N. Y. The appointment was made by the Board of Public Works, after a civil service examination of the several applicants for the place.

—Chief Engineer Robert McKay, of the Little Rock, Ark., fire department, in his annual report, states that the total expense of his force for the year was \$24,744.40, of which \$19,638.64 was for salaries. The department consists of one chief and superintendent of fire alarm system; one assistant chief on call only; seven foremen or captains; eight drivers, twelve hosemen, of whom one is a call or minute man, and one lineman on call. The chief recommends the purchase of 2,500 feet of new hose.

STATISTICS OF PRIVATE WATER PLANTS IN OHIO.

Population.	System.	Annual Hydrant Rental.	Fire Pressure. lbs. to sq. in.	Height Forced at Fire Pressure. Feet.	Meter Rates. per 1,000 gals., in accord with the average daily consumption.	Dwell- ings.	Baths. Private.
Chillicothe	Direct pressure	\$60	90	...	Rates by meter are from 6c to 30c per 1,000 gals., in accord with the average daily consumption.	The average price paid by families occupying a house of 5 or 6 rooms \$5 per year.	Average price paid, \$3 per year.
Tiffin	Direct pressure	\$90 for 1st 100, \$65 for adt.	90	120			
Galion	Direct pressure	\$50	60	60			
Kent	Direct pressure	\$50	150	75			
Urbana	Direct pressure	\$54	100	100			
Circleville	Direct pressure	\$35 for 1st 100, \$30 for adt.	90	100			
Marysville	Direct pressure	\$41	100	100			
London	Stand pipe and direct.	\$50	90	125			
Washington, C. H. ..	Stand pipe and direct	\$40	90	150			
Salem	Stand pipe and direct	\$24 for 1st 165, \$25 for adt.	130	140			
Delaware	Stand pipe and direct	\$37.50 for 200, \$30 for adt.	130	130	Rates by meter are from 6c to 30c per 1,000 gals., in accord with the average daily consumption.	The average price paid by families occupying a house of 5 or 6 rooms \$5 per year.	Average price paid, \$3 per year.
Marion	Stand pipe and direct	\$35 and \$30 adt.	120	...			
Shelby	Stand pipe and direct	\$50 and \$40 adt.	60	100			
Xenia	Stand pipe	\$35	100	100			
Warren	Stand pipe	\$45 and 25 adt.	100	125			
Defiance	Stand pipe	\$40	60	100			
Upper Sandusky...	Stand pipe	\$40 and \$36 adt.	70	...			
Alliance	Stand pipe	\$45	100	120			
Ashtabula	Gravity and stand pipe	\$40	140	200			
Massillon	Gravity and stand pipe	\$44 1st 150, \$25 for adt.	120	120			
Akron	Gravity	\$40	130	120			
Bucyrus		\$50 and \$40 adt.	90	100			

Mr. Brennan has done much to unravel some of the municipal snarls of Urbana, having been of especial assistance in bringing order out of the old chaotic gas tangle and placing the finances of the city on a sound footing. The table which he has compiled in the process of his investigation will repay a careful study.

THAWING WATER PIPES BY ELECTRICITY ?

John B. Heim, superintendent of the water works at Madison, Wis., sends "City Government" an interesting account of the thawing out of frozen water pipes in his city by the application of electricity. The inventors of the process are Profs. R. W. Wood and D. C. Jackson, who used it successfully in several cases during the recent cold snap at Madison. Prof. Wood says: "In thawing out frozen pipes a large quantity of elec-

house will contain a pool about 80 by 30 feet in size, together with shower baths and other conveniences. Concerning public bath houses, Mayor Quincy of Boston says: "The swimming pool seems to me to possess important advantages over any other form of bathing, particularly for the young. When we make something which is useful also interesting and attractive, we accomplish a great deal. The child who has to be driven into the bath tub or under the shower goes voluntarily and eagerly to the swimming pool."

SPRINGFIELD'S POLICE DEPARTMENT.

R. S. Black, the efficient chief of police of Springfield, Ohio, is agitating the question of adding the Bertillon system to his detective department and a new district telephone system to the general service. He already has a good beginning towards a rogue's gallery.

—The decision of the Supreme Court of Illinois in the case of the Aurora and Geneva Railway Company vs. Harvey, that a street railway may condemn private property for right of way, is far-reaching in its effect. It was the first case on record where a street railway has undertaken to go through private property without the consent of the owner.

DETROIT'S ANNUAL BUDGET.

The estimates of municipal expenses of Detroit, Mich., for the fiscal year beginning July 1, 1899, show a total sum of \$4,855,000. Among the items are: Public lighting commission, \$160,000; board of education, \$1,168,267; board of public works, \$1,303,885; water board, \$75,000; police commission, \$555,320; fire commission, \$700,723; park board, \$193,424; public library, \$51,321; health board, \$41,273; garbage fund, \$60,000; general fund, \$200,000, and interest fund, \$186,683.

CITY GOVERNMENT.

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SPECIAL NOTICE.

City officials and friends of City Government visiting New York are cordially invited to make the office of City Government their headquarters during their stay in the city. Desks, stenographers and stationery are placed at their disposal, and their mail may be addressed in our care.

A PARSIMONIOUS MUNICIPALITY.

For downright parsimony the city of Omaha probably beats any municipality in this or any other country. It is a fact that the various municipal departments of Omaha are operated with a great deal less money than is expended upon the corresponding departments of St. Paul, Minneapolis, Kansas City and Denver, but it is also a fact that the public service in Omaha is correspondingly cheap. The police and fire departments of the Nebraska city are not by any means adequate to the duties imposed upon them, the condition of the streets is always a cause for complaint from citizens and visitors, the parks do not compare favorably with those of many smaller cities, and, indeed, we do not know of a single branch of the municipality that could be pointed to with pride by the citizens. The people and the newspapers of Omaha, year in and year out, complain about the lack of efficiency in the departmental work of the city, but when it comes to making a tax levy, they also complain against allowing sufficient funds for properly carrying on the business of a firstclass municipality. They ought soon to learn that everything in this world worth having costs money.

Mayor Moores in his annual message, recently submitted to the Council, said:

This has been an eventful year in the history of Omaha, and even the most pessimistic citizens among us have been compelled to admit that the city has taken a giant stride forward since January 1, 1898. Every line of business has felt the effects of the general prosperity. Our clearings reached \$320,000,000 during the year, placing us on a level with Detroit and above Milwaukee, Minneapolis, St. Paul and Buffalo. The output of our jobbers showed an increase of 14 per cent. over the large business done in 1897, while our factories showed an increase of 25 per cent. Our packing houses killed 4,000,000 of live stock during the year, a gain of more than 1,000,000 over any previous year. To meet new demands our packers expended more than \$1,500,000 in packing house improvements. Omaha real estate values have undergone a steady rise. Rents have increased owing to the fact that every available house and store building is occupied.

At the same meeting of the Council that this cheerfully optimistic message was read Mayor Moores submitted his veto of the ordinance providing for a tax levy which is admittedly inadequate to meet even the fixed charges against the various municipal funds. To pass the ordinance over the Mayor's veto six votes were required, and when, at the conclusion of the roll-call, only five were recorded for the measure, and the presiding officer was called upon to cast the deciding vote, that worthy said:

"I know that this levy is insufficient, but the responsibility for it rests on the finance committee and not on me; therefore, I vote against sustaining the veto."

We do not know how the people of Omaha argue questions, but in any other community it would be quite safe to expect the people to put the responsibility for a parsimonious tax levy upon the official whose vote made such a levy a fact.

MAYOR JONES—INDEPENDENT.

This is not a partisan paper; its policy is to refrain from commenting upon any political contest. When, however, a man of the character of Samuel M. Jones, the mayor of Toledo, comes up for a re-election, we must throw all rules aside and say something. What we want to say is this: That Samuel M. Jones is a man whose heart and hand work for the common people; he has not been a good partisan mayor, perhaps, but he has been a mayor for the rich and the poor, the old and the young, the Republican and the Democrat; he has performed his official duties intelligently, fairly, honestly, without fear or favor; he has sought to secure for the people of his city all that is best in municipal life; he has made capability and integrity, rather than party service, the qualifications for holding office under his administration; he has demanded fair treatment for the public from the hands of the public service corporations; he has made an intelligent effort to give the children of his city such

educational and sanitary advantages as will make them the best of citizens, and he has done everything that an honest, kind-hearted and strong-minded mayor can do for the benefit of his constituency. We want to say that such a mayor deserves a re-election. The people of Toledo owe it to themselves to keep Mr. Jones in the mayor's office as long as he consents to stay there. Mayor Jones has not been renominated by his party—for reasons best understood by the party managers. The proof that he was beaten at the primaries by fraud is sufficiently strong to induce him to become an independent candidate. Usually we have no sympathy to express for independent candidates, but we hope that Independent Jones will be elected by a majority big enough for a big man—for surely he is no small man.

THIS MAYOR MEANS BUSINESS.

We extract in another column from the message of Mayor S. H. Brashear, of Houston, Texas, which has lately come to hand. This city has been growing with such rapid strides that its public works and public commodities are neither constructed nor conducted as one might expect in a city rapidly approaching the 100,000 population mark. The Mayor has the people at his back, and very properly so, in his demand for the best water service, the best street lighting, the best street-car service and the best sewerage and sewage disposal. While he gives full recognition to the rights and privileges enjoyed by the various corporations and acknowledges the material benefit such corporations have been to the growth of the city, he nevertheless insists upon their living up to the strict performance of their obligations to the city under the pain of having their franchises abrogated.

That the Mayor means business is evidenced by the fact that the city is about to start the construction of its own electric light plant because the electric lighting company have failed to live up to the contract agreements.

We like the ring of the message, as it exhibits firmness tempered with justice, it demands the rights of the city without violating the equally sacred rights of the municipal corporations. As a result of his recommendations for a public park, money has since been voted to purchase the land therefor at once, and the city has placed the solution of the question of proper sewerage and sewage disposal, electric light and garbage disposal and a municipal water works in the hands of Alexander Potter, consulting engineer, New York city, for immediate consideration.

Mayor Brashear is a native of Houston and was elected city attorney of that city when he reached his majority; before his

term expired he was elected Judge of the District Court, the court having the highest trial jurisdiction in the state of Texas. His district was the most important in the state, the jurisdiction extending over two counties with a population of over 100,000. Some of the most important cases tried in the state of Texas were decided by him, including that of the Missouri, Kansas and Texas Railway against the International & Great Northern Railway Company, for possession of a line of railway extending from Houston to Galveston, which was commonly known as having more financial interest involved than any case ever tried in the courts of Texas. He voluntarily retired from this office and last year, at the request of numerous citizens, became a candidate for Mayor, being easily nominated in the Democratic primaries and later elected by the people without opposition.

WASTE OF WATER ENCOURAGED.

The Philadelphia "Dispatch" recently published a ludicrous editorial against the introduction of water meters in that city. The editorial intimates that Chief Trautwine's advocacy of the water system brought to "the mind's eye" of the astute Philadelphia councilman "visions of the water meter trust." That the water consumers of the Quaker City should be protected from this meter monopoly was a duty that the council had very properly attended to, according to the "Dispatch." The humor in this editorial prattle comes from the fact that there is no water meter trust, the competition between the various meter manufacturers being sharp enough, in fact, to cut deep into the profits of the business.

The "Dispatch" editorial also contends that the introduction of meters into manufacturing plants is an "attempt at industrial suicide." If the reduction of water rates is ruinous to industrial concerns the Philadelphia paper is correct in its estimate of the result of meter measurement. It is a fact that in every city where the meter system is used water rates have been greatly reduced—as a result of preventing waste and thereby lessening the cost of supplying water sufficient for the public use.

Mr. Trautwine has produced sufficient evidence, in numerous published reports, to prove that the use of meters in Philadelphia would reduce the water bills of all consumers and, at the same time, make it possible for the city to purify its water supply. It seems to be a part of the program of those of seek to hand over the Philadelphia water plant to a private corporation to encourage the continuance of the present waste and thereby prevent the municipality from supplying purified water at

low rates. Some day the good people of Philadelphia are going to wake up.

AN ALDERMANIC IDEA.

"I don't see why property owners shouldn't be assessed for street lighting, especially electric lighting," said Alderman Klichli, of Minneapolis, in an interview, "on the same principle that requires them to pay assessments for other improvements, such as paving, curbing, sewers, water mains, etc."

It is possible for the Minneapolis alderman to go further in his special assessment idea. He might suggest that the salary of the policeman on a beat should be assessed against the property in front of which he walks.

DON'T TAX A MAN'S LABOR.

Assemblyman Streifer's bill in the New York Legislature to create an electrical commission for the city of Buffalo ought to be defeated without much discussion. The bill provides that every electrician working in Buffalo must procure a certificate of competency from the proposed commission and pay a \$3 fee for it. The commissioners are to pocket the fees for their time and expenses. In the first place it is little less than robbery to exact from workmen of any class a license fee; in the second place the provision of the bill which makes the compensation to the commissioners dependent upon the number and amount of fees collected may tempt them to sell more certificates than they should, and in the third place safe electrical construction is more likely to be secured by good rules and regulations for such work and proper municipal inspection than by all the \$3 "certificates of competency" that any fee grabbing commission can issue.

WANTS NO GARBAGE CONTRACT.

Mayor F. V. Evans, of Birmingham, Ala., hit the nail squarely on the head in his annual message to the council when he said:

"Experience has clearly demonstrated that in a growing city like Birmingham, garbage removal cannot be properly and safely done by the contract system. The amount of work fluctuates so greatly that there is no possible way of estimating the force required, and in placing a fixed compensation for thoroughly cleansing, either the city or the contractor must become the loser. The city should own and absolutely control its own wagons, carts and stock, and increase or decrease its force as occasion requires. I trust your honorable body will take this suggestion under serious consideration, and give it that thought which the importance of preserving public health deserves."

THE PROPER EXAMPLE.

Mayor Gray, of Minneapolis, was out taking a walk the other afternoon when he overheard two half drunken loafers direct insulting remarks to a woman they were passing on the street. The mayor, who, by the way, is not a big man, promptly placed the two loafers under arrest and held them until a policeman was found, when they were carted off in a patrol wagon. This is what we call the proper example for a mayor to show his inferiors in the police department.

HOW SHOULD THE FRANCHISE QUESTION BE SETTLED?

Mr. Chairman and Gentlemen:

The question you have requested me to answer presents the most difficult and important problem now demanding solution by the citizens of this republic. The widest known and ablest citizen might well shrink from the task of formulating the answer for which you ask. I certainly should hesitate to undertake it did I not feel that ten years devoted to a special study of the subject has been a fitting preparation for the responsibility I have assumed in accepting your invitation.

* * * * *

How should the franchise question be settled? But one answer can ring true to the sense of right and justice in the reason and heart of every citizen of this republic who is worthy of its citizenship. That answer is, "It should be settled in the interests of all the people." Until it is so settled agitation must continue. God's justice is done only when man is just to man. Any law or ordinance enacted to secure a settlement of this question that is unjust to the people cannot endure. All the forces of the universe that make for the good are pledged to its destruction. This question will never be permanently settled until it is settled right. To accomplish this purpose we must first determine what the requirements of justice for the people are, and then we must find a way to apply these requirements to existing conditions.

The civilization of to-day is founded upon a conception of justice which declares it to be the natural right of every laborer to own and use as he pleases the products of his labor. This right is limited by the requirement that it shall be exercised with a due regard for the same right recognized as the natural endowment of others. In isolation there is no property. As soon as a man becomes associated with others his natural right to do as he pleases with his own is limited by that fundamental principle of justice which requires that all property shall be owned and used with a due regard for the rights of others. Rights to the own-

ership and use of property are not vested rights. They are not absolute. They are granted and they may be taken away by the consent of society.

* * * * *

All honest persons are in unquestioned agreement on the following propositions:

1. A laborer is entitled to own and enjoy, unmolested, the products of his labor, the wages he received, the profit he may save.
2. A person who permits others to use his property is entitled to the return of his property unimpaired and payment for its use.
3. Private property shall not be taken for the benefit of public or private users by authority of law, without fair compensation paid to its owners.
4. Public and private users of a service rendered by others have no right to use such service without paying a reasonable price therefor.

This is justice. Any attack upon these propositions, whether ignorantly or intelligently made, is an attack upon the right to own property. It is an attack upon the freedom of laborers. It must be so recognized and dealt with by all honest persons before the people can obtain justice.

There is no popular complaint against the principles of justice here declared. All discontent has its origin in a belief that these principles are not properly applied to the distribution of property created by the joint use of the labor and capital of many persons. A proof of this charge, that satisfies the reason of a majority, is found in the enormous wealth of a few and the comparative poverty of the many.

The people believe a great wrong is being done; that the masses are not getting a fair share of the property their labors produce; that they are being robbed. While they believe this, who can blame them for seeking a means of putting a stop to the wrong, for wanting to prevent further robbery? I cannot. I will help them do it.

* * * * *

The first blow to stop the unjust distribution of property is apparently aimed at public service corporations. That some of these corporations are guilty of an abuse of power is true. That all are guilty is false. The laws under which these corporations are incorporated and are operating do not properly protect the interests of the people, nor of the corporations. These corporations as they now exist must be removed from the pathway of progress. The guilty and the innocent must alike give place to the incoming of a new order of things, in which no robber baron shall have a place that will permit him to prevent the entire benefits of all mechanical improvements, all increments from growth of population, all favoring changes in gen-

eral economic conditions from going unimpaired directly to the people.

* * * * *

Property can be owned collectively, but an industry cannot be operated without an organization. The determination of public policy may be declared by a direct vote of all the people, or by vote of their representatives in municipal councils and state legislatures. This is the legislative function. To carry their declared policy into effect, however, the people must act through constituted agents clothed with executive power. This is the administrative function. When the people own a local public service industry, they must place its operation under the administrative management of their municipal government and depend upon the efficiency of this agent to realize the best obtainable economic results; or they must lease the right to operate an individual, partnership, or corporation, under contract, the terms of which will secure for the people all the advantages they can justly claim, and guarantee to their operating agent an opportunity to secure fair compensation for the use of its capital and the responsibilities and risks it assumes. In the first instance, the people furnish all the capital, assume all the responsibilities and risks of management, and secure for themselves the full measure of all advantages and profits that their agent can earn for them. In the second instance, the people furnish the opportunity to operate the industry, grant the right to make special use of their public possessions for its purposes, and define limits beyond which all advantages and profits shall belong to the people, and within which they shall belong to the operating agent.

* * * * *

The first condition of success for municipal ownership and operation is determined by the franchise under authority of which municipalities are permitted to undertake such enterprises.

Franchises should be granted to municipalities by a general state law, uniform in its provisions for every town and municipality. This law should constitute every incorporated town and city a legal corporation for the purpose of rendering industrial public services, and clothe them with power to own and operate in the name of and for the benefit of the municipality and of its inhabitants, one or all public service industries, whenever such a policy is determined upon by a majority vote of all registered municipal voters.

This law should require:

1. That every public service industry owned by a municipality shall be owned and operated as a monopoly in order to secure for the people all benefits derivable from natural monopolies.
2. That municipalities deciding to transfer a public service industry from

private to public ownership shall take possession of all existing property, by whomsoever owned, then being used for the purpose of rendering such service, under proceedings for the exercise of the right of eminent domain, or by arbitration, if so mutually agreed upon with the owners of said property.

3. Municipal authorities to dedicate public possessions to, and to take private property for the special use required for the effective rendering of the service, and to adjust the distribution of special burdens or benefits created thereby, by an assessment of damages or benefits on the private property affected, as for other public improvements.

4. The taxation of all private and public users of the service on the basis of the cost of the service used plus such profit, if any, as the municipal council may determine; and that no service shall be furnished to a public or a private user free of charge, or at a price less than the full and entire costs of ownership and operation.

5. Every municipality to include in all statements of cost made to determine the price to be charged to public and private users for service rendered:

- (a) Interest on the entire investment at the rate paid by the municipality on its bonded debt.
- (b) The cost of insurance against loss by accidents of all kinds.
- (c) The value of municipal taxes relinquished by reason of municipal ownership.
- (d) The amount of state taxes paid.
- (e) The cost of insurance against impairment of investments by reason of depreciation from use and improvements in mechanical arts.
- (f) The cost of all material consumed.
- (g) The cost of all salaries and wages paid for administration and operation.
- (h) The cost of all sundry expenses not otherwise classified and included.

6. An addition to cost, for the purpose of determining selling price, of a sufficient annual provision for a sinking fund to fully pay at their maturity all bonds issued on account of the industry.

7. All municipalities to keep books of account for each public service industry owned and operated by them, in the form prescribed by the state, and to subject the same to an audit whenever required by a duly authorized officer of the state.

8. The creation of a competent Board of Municipal Regulation, which shall have immediate supervision of and be responsible to the municipal council for all details of administration and operation. Said board shall determine all questions of engineering, mechanical and operating details, and shall report to the municipal council at stated periods all information necessary for its guidance in deciding questions of public policy pertaining to the service.

All employees shall be protected in their

right to employment by civil service regulations which shall provide that no employé shall be discharged without cause, set forth in a written statement signed by the officer ordering the discharge, and after a proper opportunity to be heard in his own defense.

10. The municipal council shall determine the rates to be charged public and private users for services rendered to them, for periods of five years, and shall provide that all services rendered to any municipal department, or to the municipality in any way, shall be estimated and paid for at the price fixed, out of appropriations for such department, or for the general expense of the municipality.

11. The municipal council, on the recommendation of the Board of Municipal Regulation, may lease to a private person, partnership or corporation the municipal franchise and property then used for the purpose of a public service industry owned by the municipality, on terms that will secure to the municipality all the benefits of municipal regulation provided for in the act, and the additional advantages of employing private capital, for which interest on the entire investment shall be paid at the same rate per cent. as the municipality is at that time paying on its bonded debt, and all responsibility and risks of management to be assumed by the lessee, in consideration of the determination of rates for periods of five years, to be charged by said lessee for services to be rendered to public and private users, on the basis of cost as herein provided, plus a profit calculated at twice the rate per cent. of interest then paid by the municipality on its bonded debt, such lease to terminate at the expiration of any period of five years, at the option of the municipality.

12. To reimburse the state for the loss of taxes relinquished by reason of municipal ownership and for the expense of supervision and auditing municipal public service accounts, and for the publication in an annual volume by the state, which is hereby required, in form to facilitate reliable comparisons, of the reports of all municipal public service industries, each municipality shall pay to the state an annual tax of one per cent. on its gross receipts from the sale of service to public and private users.

These requirements are designed to develop the highest attainable degree of efficiency for municipal governments, the agent to which the people must intrust the administration of their public service industries when they adopt the policy of municipal ownership and operation.

It is only through expert and honest management and just individual distribution of the burdens of providing the required investment, and of the costs, responsibility and risks of ownership and operation, and by the just distribution of benefits collectively earned, that the people can hope to realize from mu-

nicipal ownership and operation the full measure of the advantages they seek.

* * * * *

That public service industries are natural monopolies and should be so recognized and dealt with is a fact conceded by every intelligent student of the subject. The failure to apply the economic law of monopolies to these undertakings and to regulate them in accordance with its requirements is responsible for all the evils of which the people justly complain. All attempts to secure the best services at the lowest practicable price for users through the regulative force of competition have been, and must always be, as illogical and abortive as an attempt to quench a fire with oil.

In order that there may be no division of a public service industry, no duplication of investments and management, no destruction of capital through the wastes of a war of competition, and that all benefits derivable from a monopoly may be secured by the people, it is necessary, in applying the principle of municipal ownership and operation, for the municipality to take for public use all property then employed in rendering the service.

* * * * *

It is clear, when the price of a service is based on cost, that an understatement of cost must be unjust to taxpayers, because it will inevitably create a deficit which must be paid by taxation; and that an overstatement of costs must be unjust to users, because it will require them to pay more than the actual cost of the service, and thus create a surplus for the benefit of taxpayers. For these reasons the fundamental basis of a correct public policy must not be left to the judgment of the uninformed, or the caprice of the politically ambitious. It is as clearly the duty of the state to protect property-owners, on the one hand, and private users on the other hand, from unjust exactions by municipal authorities through insufficient or exorbitant charges for public services, as it is to curb the greed of corporations, or safeguard property from being stolen. The state cannot protect users and taxpayers without rigidly requiring that all services must be assessed and paid for at cost, plus any profit that may be authorized by the people, of whom users are in the majority. It must specify all items of cost and make the requirement mandatory that all of the items must be honestly included in every statement made for the purpose of determining cost as a basis for price.

If the management of municipal public service industries is to be determined solely by the application of sound business principles, municipal governments must be as free as private corporations to secure a commercial advantage in whatever way it can be best obtained by operating or by leasing its franchise and property.

Municipal governments possess no power to achieve success in the management of industries beyond the limits assigned by the honesty and intelligence with which they are administered and the economic conditions under which they are operated. So long as there are some successes and many failures in the management of private corporations there will be some apparent successes and many failures in the management of industries by municipalities. It is an ordinary occurrence for the owners of private property to lease its use to others who are better able to manage it successfully. The right to lease is as valuable as the right to own. It is simply the right to dispose of the use of property to the best advantage for its owners.

A right given to municipalities by a general law of the state to lease their franchises and property used for the purpose of rendering a public service will not affect any municipality that is managing its industries in an efficient and satisfactory manner. It will open a way out of difficulties for any municipality which, through faults of its own, or a combination of circumstances it is powerless to control, finds itself temporarily unable to manage an industry to as good advantage for the benefit of its inhabitants as it can secure by contract with private persons. The law is permissive, not mandatory. It should limit the lease to the short period of five years, thus securing for the people an opportunity to review their action at frequent intervals, and to change their policy in such way as may at the time appear to them to be best calculated to serve their interests to their best advantage.

* * * * *

A general adoption of the policy of the municipal ownership and operation of public service industries will result in the withdrawal of an enormous amount of property from the taxable list, and a consequent great loss of revenue to the state, unless provision is made whereby the state can derive a revenue from municipally owned and operated industries. While municipalities should be free in the management of these industries to carry out their adopted policy in their own way, so far as it affects solely their domestic affairs, it is unreasonable for them to claim exemption from the policy of the state adopted to regulate its relations with all corporations—municipal and private—owning and operating public service industries. The requirement of the state, on both classes of corporations, should be identical.

* * * * *

Under municipal ownership and operation justice demands that users shall pay the full and entire cost of the services rendered to them. No honest user can intelligently claim that price should be fixed below cost.

Under corporate ownership and operation justice demands that users shall pay the full and entire cost of the services rendered to them, plus a reasonable profit arbitrarily fixed at twice the rate percent., calculated on the entire investment, that the municipality is paying on its bonded debt.

The fact that users will be required to pay no profit in one case and a profit in the other case, may lead the non-critical to suppose that prices to users will be lower under municipal than under corporate ownership and operation. Such a conclusion can be reached only by those who neglect to take account of and to properly value the profit-producing factor of self-interest, which is eliminated under municipal and retained in full force under corporate management.

By adopting a short term adjustment on an agreed and clearly defined basis, all antagonisms growing out of efforts to gain an advantage by corporations, or by the people, through fixing prices for services and rates of compensation to be paid to the city for fifty, or thirty, or twenty, or even ten years, and making franchises terminate at the same time, are avoided. Experience teaches how absolutely incapable those in authority at any given time are of forecasting the future with sufficient accuracy to enable them to determine what conditions shall regulate a public service, even ten years in the future, not to mention longer periods.

(Continued on page xiii.)

CHIEF MURPHY'S ANNUAL REPORT.

Chief of Police Benjamin Murphy of Jersey City, N. J., always makes his reports readable, but the one he has recently submitted for the year 1898 contains an unusually large amount of interesting matter. "City Government" ought to print the chief's report in full, but space being limited, the following quotations are taken:

"For some years back our city has been free from the stigma of the reputation of being a green goods city, but about the latter part of September last thousands of green goods letters were mailed from adjoining cities asking intended victims of this old game to telegraph by the Western Union Telegraph Company to fictitious names and addresses in this city, thereby advertising our city as a place where this swindle can be perpetrated, when, as a matter of fact, the swindlers were not located here, and these dispatches were forwarded to other places by the manager of the said telegraph company, and there delivered to the green goods operators, who arranged to meet the dishonest countryman when he came on to buy what he expects to be counterfeit money. When the countryman forms the acquaintance of the sharpers he knows that he was

not swindled in Jersey City, but as victims rarely tell of their trip to buy green goods, very few but themselves know of it, and as fully 98 per cent. of those who get letters from the swindlers never reply, it is to be presumed they believe this city to be a place where the swindlers hold forth.

"In the interest of the good name of our city, I procured evidence upon which an indictment was found by the Grand Jury against the Western Union Telegraph Company and its manager in this city for aiding and abetting green goods swindlers. In 1894 I took similar action against this same manager, which caused a presentment to be made charging him with being an accomplice of a gang of green goods men then operating here, the result of which was to put the gang out of business in this city.

"I am pleased to report that in all homicides in the city the guilty parties were apprehended. The taking of human life by murder is very properly looked upon as the most serious of all crimes, and if the perpetrators of this crime are not captured and brought to justice the people look upon their police as inefficient. It is the proud boast of this force that they have never, in eighteen years, failed to catch all persons guilty of murder in this city.

"Since the adoption of the resolution requiring all new men to be approved of by the chief before appointment, we have got very much better material, as they must be the regulation height and age and of good character. The average age of the men appointed the past two years is 26 and a fraction.

"It is due to the service and the taxpayers that men should not be made policemen who are over 35 years old. Jersey City should get at least twenty-five years' service from their police officers in consideration of the city taking care of them when unfit for service.

"The Bertillon system of identification has proven itself so far ahead of the old-fashioned style of simply taking a picture of a criminal and his other brief description, that its usefulness is evident at all times. During the year we have had six important criminals arrested by us identified through our central office at Chicago that otherwise we would not have known anything of outside the crime we had them for."

MAYOR MC KISSON BEAT HANNA.

After a most exciting campaign, Robert E. McKisson has been renominated for mayor of Cleveland, Ohio, by the Republicans. The fight at the primaries was distinctly between the Hanna and McKisson forces, and the latter won out by a majority of over 7,000. This is Mr. McKisson's third nomination for the mayoralty.

ST. PAUL POLICE DEPARTMENT.

Chief of Police M. N. Goss, of St. Paul, Minn., has sent to "City Government" an advance copy of his annual report, which shows that his department at present consists of 181 employees, as follows: One chief, 1 secretary to chief, 1 chief of detectives, 4 captains, 7 lieutenants, 10 sergeants, 4 detectives, 1 superintendent police telegraph, 1 license inspector, 1 driver workhouse van, 1 janitor, 1 matron and 148 patrolmen.

Of the 148 patrolmen, only 121, including 8 mounted and 12 bicycle patrolmen, are available for patrol duty, 27 of the 148 being detailed as follows: Four special detectives, 1 dog license inspector, 3 bailiffs in Municipal Court, 1 desk sergeant, 1 detailed at mayor's office, 1 detailed at Union depot, 2 conductors of patrol wagon, 6 drivers, 7 jailors and 1 conductor workhouse van.

"I consider this number of men," says the chief, "entirely inadequate to properly patrol a city the size of St. Paul, with a population of 175,000 and an area of fifty-five square miles of territory. The year just closed has been an uneventful one in police circles. This fact is proven by the marked decrease in the number of arrests. The total number of arrests during the year were 4,086, a decrease of 992 as compared with the previous year.

"During the year the amount of property reported lost and stolen was valued at \$16,494.40, of which \$11,044.00 was recovered and delivered to the lawful owners. The total valuation of personal property belonging to this department is \$17,000.00. The total expenditures of the department during the year were \$169,603.61, of which \$164,623.37 was for salaries.

"I respectfully call your attention to the deplorable condition of the police telephone system. This branch of the department should be ever in a first class working order. The present telephone and alarm system is old and worn out, and requires much labor and expense to keep it in repair. I recommend that either an entire modern system be installed or else a change in the telephone part of the present system, and other permanent improvements be made. It is very essential that the telephone system be perfect, so that communication may be had at all times without interruption between the different stations, and the officers and patrolmen while on duty, also with the Minneapolis police department.

"The detective department, under the charge of chief of detectives, Phil. W. Schweitzer, has rendered efficient service during the year. In conclusion, I wish to say that the discipline of the force and the general deportment of its members is worthy of commendation."

LEAGUE OF AMERICAN MUNICIPALITIES

Dates for Syracuse Convention.

This year's convention of the League of American Municipalities will be held on Tuesday, Wednesday, Thursday and Friday, September 19-22. These dates have been settled upon by the executive committee of the League, after consulting Mayor McGuire, of Syracuse. September is always a most delightful season in Syracuse, the temperature being neither too hot nor too cool. Mayor McGuire, the City Council and the people of Syracuse are already devising plans for the entertainment of the hundreds of city officials who will attend the convention. That a royal good time will be provided for is a certainty.

The sessions of the convention will undoubtedly bring out more of interest and value to students of municipal affairs than has been produced by any previous meeting. Mayor S. M. Jones, of Toledo; Mayor James Gray, of Minneapolis, and Mayor William C. Flower, of New Orleans, three of the most studious and progressive chief executives in this country, constitute the programme committee, and they will arrange a series of addresses and discussions that will certainly result beneficially to the municipalities represented in the convention.

The membership of the League is increasing rapidly, and Secretary Gilkison asserts that there will be fully twice as many cities represented at the Syracuse convention as were present at the Detroit meeting last year.

Illinois State League Formed.

Through the efforts of Mayor John Warner, of Peoria, and Secretary Gilkison, of the national organization, a league of Illinois municipalities has been formed. A largely attended and most successful convention was held at Peoria March 1 and 2, delegates being present from nearly all of the important cities and towns in the state. The constitution adopted for the permanent organization is similar to that of the Ohio league, and the new body proposes to take a hand in shaping state legislation on municipal subjects. The officers of the League of Illinois Municipalities are:

President, M. M. Stephens, mayor, East St. Louis; vice presidents, S. Lager, mayor, Joliet; Daniel Sapp, mayor, Pekin, and Mayor Thistlewood, Cairo; secretary and treasurer, J. F. Farrell, mayor, Seneca; trustees, John Warner, mayor, Peoria; T. J. Medill, Jr., mayor, Rock Island, and A. E. Price, mayor, Elgin.

New York's Delegation was Pleased.

The delegation of the New York City Board of Aldermen who attended the con-

vention of the League of American Municipalities at Detroit last fall have submitted their report, which has been printed in full in "The City Record." The report is quite lengthy and is full of praise for the League. We quote from it as follows:

We were cordially received and most hospitably entertained. It was especially gratifying to the officers and members of the convention, that New York manifested, by the presence of a delegation, that it was interested in the movement and work of the League. We cannot commend that work too highly. It tends to instruct toward a better understanding of municipal questions and the solving of interesting and complex municipal problems. We advise an active participation in that work. We urge that all moral and material aid that can be given should be freely and liberally extended. We know that by a union of effort municipal duty will be more clearly understood; municipal necessities more generally appreciated, and the strengthening and broadening of all the principles and elements that tend to form and make up official municipal life will be assured. Every city in the United States ought to be a member. There is ample cause, in the direction of mutuality of interest, for such an alliance.

After reviewing the addresses and discussions of the Detroit convention, the report says:

The character of the proceedings, the intelligence of the membership, the instructive nature of the arguments presented by those who had special subjects to dilate upon, and the general discussion on each subject, all tended largely towards emphasizing the advantages of the League, and demonstrating that its growth and perpetuity were assured.

With the report were submitted a set of resolutions providing for the sending of a large delegation from the New York city government to the next convention at Syracuse, and also inviting the League to meet in New York city in 1901.

Spokane is Well Satisfied.

Cities in the remote Pacific coast states, although they may never care to incur the heavy expense of sending delegates to the annual conventions, will find membership in the League of American Municipalities highly beneficial. Such cities find the service of the league's bureau of information, which continues throughout the year, of great value in dealing with municipal problems that must be carefully considered by their officials. In a recent letter to Secretary Gilkison, Mayor E. D. Olmstead, of Spokane, Wash., wrote: "Our city government feels that the money we have paid out for the purpose of belonging to the league has been well expended, and we wish to lend our influence toward spreading the gospel of good government by inducing other cities to join."

One of Many Editorial Endorsements.

Among hundreds of editorial endorsements, the league has received the following from the Elmira, N. Y., "Daily Advertiser":

"One of the greatest problems in American political life is the government of municipalities, and this is especially true because so large a proportion of the inhabitants of the country reside in cities. An organization for the study of problems concerning such corporations has been formed and the proceedings of its second annual meeting have just come to hand.

"The meeting was held in Detroit last August and attended by representatives of seventy-two cities. The convention was attended by many able men, and the discussions were of great practical value. One of the most important features of the organization is a bureau of information about city affairs in which is gathered the facts about almost every feature of municipal business covering more than three score subjects. The organization of such a league is an indication of a growing interest in those public affairs which are nearest to the citizen in his every day life. There is no reason why American cities should not be among the best governed of civic organizations, instead of the opposite. It needs only that all citizens devote a little time every year to their city's affairs and see to it that good and competent men are chosen to conduct the public business.

"The universal complaint is that really excellent men are loath to serve their home cities. They go further even than that and neglect the primaries so that others than fit and trained men are permitted to run public affairs after purely political methods and largely for their personal benefit. Whatever helps to arouse an interest in public affairs is good and when representatives of cities throughout the country meet to discuss the problems with which they have to deal they should command a wide hearing. The League of American Municipalities is a league of officials, not of private citizens, doctrinaires, and the papers and discussions in convention are worthy of careful attention."

FREE GARBAGE RECEPTACLES.

J. H. Whyte has made a proposition to the council of New Orleans whereby he proposes to give to every house-holder in New Orleans a metallic garbage can capable of holding ten gallons of refuse matter. These are to be supplied free of cost. He also promises to place through the business section of the city twenty-gallon metallic cans which are to be used as receptacles for paper and other refuse matter which come from stores. Of course, Mr. Whyte is not doing this for his health. Where his profit will come in will be from painted advertisements on these cans. It will take an outlay of nearly fifteen thousand dollars to supply these cans, consequently it can be seen that the deal is not a cheap one by any means. Similar schemes are in operation in other cities.

NEW MAYORS IN PENNSYLVANIA.

New mayors of cities in Pennsylvania were elected last month as follows: Philadelphia, Samuel H. Ashbridge; Lebanon, Conrad G. Gerhart; Harrisburg, John A. Fritchey; Altoona, Ellsworth F. Giles; Johnstown, Lucien D. Woodruff; Allegheny, James G. Wyman; Chester, Dr. Jefferis; Williamsport, S. N. Williams; Easton, Dr. B. Rush Field; Allentown, James E. Schaadt; Lockhaven, William F. Elliott; Oil City, John M. Reed; Bradford, J. C. Greenewald.

MUNICIPAL CONTRACT DEPARTMENT

COST OF BRICK AND GRANITE PAVEMENTS.

Horace Andrews, city engineer of Albany, N. Y., in his annual report, just issued, makes a very interesting statement of the comparative cost of brick and granite pavements. He says that in his city about 68,000 square yards of granite have been laid on concrete foundation, with pitch or cement filled joints, under twenty-five separate contracts, at an average cost of \$2.945 per square yard. In connection with this pavement 17,053 square feet of crosswalk stones were used, costing about 19½ cents per square foot over and above the cost of the granite pavement. The average cost of first-class granite pavement, including crosswalks, has, therefore, been \$2.993 per square yard.

There have been fifty contracts for brick paving, comprising 226,506 square yards, at an average cost of \$1.836 per square yard; 2,271 square yards have also been laid at an unknown cost.

The area now paved with bricks in Albany would have cost \$253,579.21 more if it had been paved with granite. In addition to this saving the further sum of \$11,187.21 would have been required for crosswalks, making the entire difference in cost between the brick and a like area of granite, \$264,766.42.

The life of brick pavement is unknown but can be safely estimated to average eight years on Albany streets. In many cases it will last in good condition very much longer. In like manner it may be fairly estimated that granite pavement at the end of twenty-four years will become so badly worn and approximate so closely to the condition of a cobble-stone pavement that it should be taken up and replaced with new. The concrete in any case should remain in good condition indefinitely.

Assuming the cost of new bricks laid on the old concrete to be 90 cents per square yard, it is found that the entire investment of capital, including the cost of the original brick pavement, at \$1.836, two renewals of bricks and compound interest at four per cent. on all sums invested, will be at the end of twenty-four years \$7.624 per square yard.

With granite pavement at \$2.993 per square yard, the entire investment of capital, including first cost of pavement, compound interest at four per cent., and no renewals will, at the end of twenty-four years, be \$7.673 per square yard.

The excellence of the brick pavement during this twenty-four-year period

should surpass that of the granite in all points that are regarded as of merit in a modern pavement.

The use of bricks on steep gradients is attended with as little inconvenience as any smooth pavement will occasion. Under ordinary circumstances horses maintain their foothold well on grades of seven per cent. to nine per cent., which are the greatest in use in this city, for brick pavement.

Sewerage System for York.

The city of York, Pa., will most probably put in a new and complete sewerage system, to cost about \$200,000. A committee of the Board of Trade, which has been investigating the matter, recently submitted a report, from which the following extract is taken:

"We need not at this time plead the necessity of a sewerage plant. The late typhoid epidemic, attributed by many to the impurities of your water supply, may we think, have been due as largely to the condition of the soil, impregnated as it is by the excreta of man and beast, and by the waste of the kitchen and shop. The long draught followed by the heavy rains of early spring, carried these impurities into your wells, into your drain pipes, into your houses. Result—disease.

"At least, such conditions as these, together with cheap and improperly constructed drain pipes, have frequently been found, from actual examination, to be the cause of typhoid epidemics.

"There are two main systems, the combined and the separate. Your committee has concluded that it is better to dispose of the rainfall or storm water as heretofore with such changes as may, in the opinion of a competent engineer be deemed necessary, and that a separate system be designed to carry off only the products of bath rooms, water closets and kitchen wastes not already and properly disposed of as garbage. The separate system allows of much smaller pipes and they are much less expensive, being smaller they will always be well filled and give less opportunity for the accumulation of gases deleterious to health. They are, too, more easily ventilated and flushed and more cheaply cared for.

"The construction of sewers upon true sanitary principles has long since passed beyond the experimental stage. The sanitary disposal of sewage requires a familiar acquaintance with so many questions apart from that of mere engineering, that it has become a profession of its own. Hence the necessity for the employment of an engineer, the best obtainable, familiar with all its branches. An improperly planned or constructed sewer becomes a menace instead of a benefit."

Big Improvements Contemplated at New Orleans.

A project is now under way in the city of New Orleans for the establishment of an extensive sewerage, drainage and water works system for the entire city. In order to accomplish the work it is proposed to levy a special tax of two mills of the dollar, the proceeds of this tax to be capitalized by a bond issue of from twelve to fourteen million dollars. As a basis for this action it is necessary that a majority in number and amount of the property taxpayers of the city should approve the plan and vote the tax, and as a condition precedent to an election to determine that question, one-third of the property taxpayers must sign a petition calling for the levy by the city council. Legislative and constitutional ratification will be sought afterwards. The petition is now being circulated among the property owners of the city, but the matter has not yet reached a definite conclusion.

New Garbage Contract at Rochester.

The Board of Health of Rochester, N. Y., will receive bids until March 31 on a new garbage contract for one year, to begin April 1. The contractor must be a resident of Rochester, collect and dispose of the garbage in a sanitary manner and give a personal bond in the sum of \$10,000. No particular system of disposal is specified.

Improvements at Springfield, Ohio.

Among other pressing needs the city of Springfield, Ohio, is looking about for the best incinerator or garbage plant and method of treating sewerage.

Springfield is soon to commence the construction of a complete and up-to-date sewer system. It is a much needed improvement and will cost about \$400,000.

Springfield will also construct a combination work house, station house and patrol house. It is to cost about \$20,000. The commissioners are now looking for a site.

At an early date Springfield's fire department will commence the construction of a new fire house on the north side of the city. It will be equipped with hook and ladder truck and hose wagon.

Two Miles of Brick Pavement.

The City Council of Anderson, Ind., has authorized the construction of two miles of street pavement, the work to begin as early in the spring as possible. Property owners along the streets to be paved have expressed a preference for brick.

ADOPT THE VOTING MACHINE.

With practical unanimity, the Board of Aldermen of Buffalo has adopted a resolution reported by its special Redistricting Committee, approving the change of system from the Australian ballot to a voting machine. The only negative vote was cast by Alderman Potter, who favored the experimental use of one machine in a ward before purchasing. Alderman Sullivan, one of the strongest advocates of the use of voting machines, showed that they had been successfully operated in Rochester and other cities. The report of the committee set forth the numerous mistakes in marking ballots under the present system and the delay in securing the returns. The committee estimates that the saving in clerk hire, cost of printing and other items will amount to over \$17,000 annually if the number of districts is reduced from 155 to 120, and to more than \$19,000 if reduced to 110. At this latter rate the saving would pay for the machines at \$500 each in three years.

No selection of a machine has yet been made, but the United States machine, manufactured at Jamestown, N. Y., will probably be selected.

BURLINGTON STREET IMPROVEMENTS.

Mr. W. J. Van Patten, former mayor and present chairman of the advisory board on permanent street improvements at Burlington, Vt., has sent to "City Government" a copy of the report of that board, which shows that Burlington is in the front rank in the progressive cities of New England in the matter of the permanent improvement of its streets. The report shows that during the past year a number of streets were improved with macadam of 8-inch depth at a cost ranging from 53 to 75 cents per square yard; two streets were paved with brick on concrete at a cost of \$1.93 and \$2.01 per square yard, respectively, and several other streets were improved with gravel and Telford. The report says:

"Of the work that has been done in the past year we would call attention to the paving of the north part of Church street with vitrified brick. After careful investigation the advisory board was unanimously of the opinion that this style of pavement was the best adapted to the streets where heavy traffic was necessary and where the street railroad track was placed, of any of the different methods of paving."

The board recommends that an additional sum of \$50,000 be expended for street improvements at the rate of \$10,000 per year for the next five years.

ESTIMATED COST OF LIGHTING PLANT.

City Engineer Turner, of Dayton, O., has reported to the city council an estimate of the cost of a municipal electric light plant. His estimate is as follows:

Complete pole line construction, exclusive of arc lamps.....	\$ 56,000
Arc dynamos, arc lamps and switchboard	38,000
Water tender boilers with automatic stacks, brick work and stacks	26,000
Compound condensing engines, including condensers, pumps, etc.....	15,000
Power house	7,000
Total	\$142,000

Mr. Turner says that the above esti-

mate is on the highest priced class of apparatus which can be selected, for a plant with a capacity of 850 arc lamps of 2,000 c. p. each. The estimate includes the cost of one extra boiler, but does not include the cost of extra dynamos and engines, and the engineer recommends that at least \$8,000 be added to the estimate for an extra dynamo and engine, making the total estimate for the plant, exclusive of building site, \$150,000.

DEPARTMENT OF INQUIRY.

The editor of CITY GOVERNMENT will undertake to furnish, through this department, replies to all inquiries pertaining to municipal affairs sent in by subscribers. The names of inquirers will not be published in any case.

Municipal Ownership of Asphalt Plants.

Would it be advisable for a city to own and operate a municipal asphalt paving plant?

No city that we know of has yet undertaken the operation of an asphalt plant for repair and new work, although the proposition has been suggested in a number of municipalities. There would be difficulty in keeping a municipal asphalt plant from becoming a part of a political machine, for the same reason that some of the most competent city engineers in the country lose their positions through political changes. An important matter that would have to be looked up is whether or not a city attempting to make its own asphalt streets could obtain a supply of asphalt. Some of the asphalt companies are probably tied up to local contractors, while others would hesitate to permit the use of their material by a city plant unless they were convinced that those in charge of such a plant were fully competent to manipulate the material. The asphalt paving industry is not a natural monopoly, and competition with its consequent fair prices can be secured in all cities where the officials desire it. In such cities there is little doubt that it is the most economical plan to let out asphalt work by contract. In cities where the authorities prepare specifications for asphalt work so as to shut out competition a municipal plant of any kind would be a failure. On the subject of municipal ownership of asphalt plants, "City Government" has secured the following statement from Mr. C. S. Chamberlin, secretary of the Sicilian Asphalt Paving Company of New York:

"As an asphalt paving company, we are naturally against the municipal ownership of asphalt paving plants, for such an innovation would not only deprive all of the asphalt paving companies of a legitimate business, but it would also throw all or nearly all of their employees out of work. It would, furthermore, cause a great hardship to the asphalt paving contractors, for the reason that when they took contracts which included an agreement to maintain the pavement for a term of five, ten or fifteen years, they properly figured upon being able to get new work in the future, and thus being able to keep their plants running and do repairs at a moderate price. If now they can get no more new work, but are left with the maintenance contracts on their hands, they will have to keep their plants in operation for repairs only, which latter will then cost the con-

tractors many times over what they receive for same.

"In our opinion as citizens, municipalities should only undertake such functions which must by the very nature of things be managed by the community. For instance, we thoroughly believe in the municipal ownership of water works, for the reason that if there were competition there would be two or more sets of water mains and pipes in all streets, which would involve the waste of the interest on the cost of all systems of mains after the first. Then, too, the trouble from leaks and similar occurrences is increased in case there is more than one system, and there is no corresponding benefit. We consider, too, that in the case of furnishing gas, electric light and power and all similar services only one system should be allowed in each street. Whether this can best be secured by municipal ownership or by granting only one charter for each street, under proper restrictions and conditions as to process, etc., we must leave to others more versed in municipal affairs to determine.

"When, however, it comes to asphalt pavements there is no possible justification for the municipalities to interfere with a private industry. Two or more companies cannot conflict in the laying or maintaining of a pavement in any one street, as the contracts must naturally be given to one concern and a second one would have no right to work there until the first one's contract had expired. Then, too, there is no disadvantage to a municipality when asphalt plants are built within its limits, for every one that is erected increases competition and causes corresponding reductions in price.

"Then we come to the old question of whether employees under municipal management will usually work as hard and as quickly as they would under private management. If this question is answered in the negative, as general experience leads us to suppose, it follows that it will cost the city more to lay its own asphalt pavements than to have them laid by contract. It will still be necessary for the cities to purchase their asphalt, as a city is not likely to have an asphalt deposit within its limits, and this side of the business is open to grave abuses. Asphalt is not like an ordinary commodity which has a regular standard and a commonly known market price, for the owners of each deposit claim certain peculiar advantages for their material, and it is true that the materials differ very largely. From this it follows that if a municipality purchases its asphalt at the lowest figure bid per ton, it would not necessarily be getting the cheapest asphalt. If, on the other hand, it picked out a certain kind of asphalt it wished to have and only took bids on that, there would be a perpetual outcry against favoritism, etc. With the very best will in the world, we do not see how a municipal officer could purchase asphalt in such a manner as to give every firm dealing in the material a fair chance. There are none of these difficulties in the way when a city takes bids for completed pavement, including a term of maintenance, for all it has to do is to admit to competition every asphalt pavement which has been tested and found satisfactory for a reasonable number of years, to require all bidders to furnish the same bonds with good securities to secure the proper laying and maintaining of the pavements, and then to award the contract to the lowest bidder."

New Laws for New York Cities.

Has a new general law for the government of cities in New York state been passed, and if so, what is its nature?

A new general law for the government of cities of the second class (Rochester, Syracuse, Albany and Troy) has been passed and will go into effect January 1, 1900. The distinctive feature of the law is the concentration of power and responsibility in the hands of the mayor. All the administrative officials, except the comptroller, treasurer and assessors, are appointed by the mayor without the confirmation of the council, and may be removed by him at any time. A meeting of heads of departments with the mayor for consultation and advice must be held at least once a month. The mayor and his appointees constitute a majority of the boards of estimate and contract. The mayor may veto any ordinance or any part of an ordinance that pertains to more than one subject and also any item of an appropriation bill. His veto can be overcome only by a three-fourths vote of the entire council.

Legislation for Bicycle Paths.

Has there been any recent legislation providing for the construction of bicycle paths?

Massachusetts has passed a law empowering cities and towns to lay out, construct and maintain bicycle paths and to appropriate money for the same. The general highway law so far as applicable is extended to bicycle paths. In Ohio county commissioners have been authorized to levy a license tax of \$1 a year on bicycles and with the proceeds construct and maintain bicycle paths. In New York state a law has been passed that requires that in sprinkling streets in cities of the first class a dry strip three or four feet in width shall be left in which bicyclists shall have the right of way.

CORPORATIONS AND THE MUNICIPALITY.

Mayor S. H. Brashear, of Houston, Tex., takes the public service question by the horns in his message to the council. He says:

"The mayor regrets to state that while some of the corporations enjoying franchises have fairly striven to comply with their obligations to the public and the city government, others have been very negligent, and in some cases almost defiant in their failure in this particular. With a city occupying the proud position of Houston, commercially and industrially, many of these corporations are necessary to its welfare, especially the railroads, and recognizing the interests of our people as inseparable from the allowance of proper facilities to these companies for the conduct of their business they have for years past been granted every reasonable concession. Now, since the rapid advancement of the city their franchises have become more and more valuable, and their duty to faithfully observe the conditions annexed to their grants should be greater than ever.

"The service of the electric light and water companies is very poor, and since you have been in office your finance committee has refused to approve their bills except one-half the amounts thereof, the city taking the position that the

value of the service given has not been worth much, if anything, in excess of that figure. Owing to the length of time necessarily taken in preparations of that character it is recommended that steps be taken at once toward establishing a water works system to be owned and controlled by the city herself, so that same may be ready for operation when the present contract with the water works company expires a few years from now, or before that, if you see proper to rescind the contract on account of the failure of the company to perform its contract with the city.

"It has been decided by a vote of the taxpayers that the city shall issue bonds and establish its own electric light system; this is an imperative command to the council to carry out this decision.

"Our street railway service, while good in some respects, should be improved in others. It is no more than right that the street railway company should (under reasonable conditions) give transfer tickets over its connecting lines. Under the present system a passenger desiring to travel only a short distance is often compelled to pay two fares. While the right of the city to regulate this matter has never been settled by our state courts I am of the opinion that it is well worth an effort to give our citizens this relief.

"This company having failed to pay its share of the cost of paving several streets, suit has been entered and is now pending for the amount due."

Columbus Lighting Plant.

The city of Columbus, Ohio, is taking the first steps toward owning and operating an electric lighting plant. On the first day of January it placed 100 arc lights of 2,000 candle power in service and a like number early in February. Further extension of the service is contemplated in the near future.

Superintendent H. M. Lyman, who has charge of the new plant, was seen by a representative of "City Government" and said:

"The cost of the plant, when completed, will not exceed \$55,000, although \$68,000 was appropriated for the work. At present we have about 400 lights in service, which will cost about \$40 per light and save to the city an even \$35 on a light as compared with what we are now paying for the 806 lights furnished by private companies. If the city owned the entire system it could be run at a total saving of about \$28,000 per year. These figures are based upon the present cost per light of the new city plant."

When asked how he accounted for the large saving in the expense per lamp he replied:

"It is partly due to the fact that the city makes all the profit and also to the large use of water power, which, as the city owns the water plant, costs us comparatively nothing. Our generating station occupies a space of 25x46 feet in the east end of the west side pumping station. While the connected lights only number 384 at present, the generating machinery will operate 600. It consists of one battery to a 250 horse power engine, which is connected by a rope drive to two dynamos of 150 lights each; two 110 horse power water wheels, or water

motors, each being directly connected by means of a flexible coupling to a 150 light arc dynamo.

"Since available funds to pay the operating expenses of the plant are so limited, the only feasible plan was to install apparatus of the highest commercial efficiency, and each and every device about the plant has been of such type as is known to be of high economy, and on this basis the following selections were made: The two boilers are of 150 horse power each, of the water tube type, made under the Moyes patents. They are designed to carry 150 pounds of steam, and were tested and made tight under 225 pounds of water pressure during erection. The grates are of the rocking pattern, to be fired by hand with lump coal. As the city water in Columbus is very hard, it is impossible to prevent heavy deposits of scale, resulting in a great loss of heat and heavy repairs, so provision has been made to supply this battery with distilled water, which is secured by condensing the steam after it has done its work in the engine and returning it to the boiler, passing it through a heater where the exhaust steam from the condenser and feed pump is utilized to raise its temperature. This heater is of the open type, the water being maintained automatically at a uniform height by means of a float operating a valve which admits enough fresh water from the city mains to make good the small percentage of loss of distilled water.

"The two water wheels installed for driving two of the dynamos are the kind generally used for high heads, known as impulse wheels. The action of the water being derived from the impact of several one-inch streams upon the rim of a wheel provided with cups for the purpose. These wheels are unique in their manner of governing, as since the water has to be pumped they are designed to save water at light loads as well as heavy loads, while most water wheels are allowed to waste the water when the loads are light. The speed of the wheel is 650 revolutions per minute, which is controlled by a fly-ball governor, which turns on or off more or less jets of water as the case requires. These units, with two water wheels connected, are the simplest arrangement yet found to drive a lighting dynamo. These wheels are installed to use the water which ordinarily goes to waste after passing through the pump in order to keep the pumps running at an economical speed during the night, and therefore is a very cheap power.

"The engines, dynamos and the entire apparatus is of the latest improved design, it being considered wise and economical to get the best that was to be had, and thus far our experience has shown that to have been a good policy."

The "City Government" man learned that the city of Columbus is indebted to the clear-headedness and wise policy of Mayor Black for many of the financial and economical provisions for the new plant. He also had an eye out for the interests of home labor when he secured the insertion of a clause in the specifications stipulating that none but Columbus working men should be employed for construction work.

This municipal lighting plant was made possible through the persevering efforts of Councilman Otto Nusbaum, who is called the father of the municipal electric light plant of Columbus. Against great odds and much opposition Mr. Nusbaum, after indefatigable labors, has gained his point.

**UNDERGROUND TROLLEY RAILROADS
DISCUSSED.**

"Are Underground Trolley Railroads Practicable in Chicago?" was the question which formed the subject of the discussion at a recent meeting of the Engineer's Club of Chicago.

Edward B. Ellicott, city electrician, took the affirmative of the question and maintained that with proper construction and equipment there was no necessity for operating the overhead trolley in Chicago any more than there was in New York city and Washington, where the underground system has been in successful operation for several years. Opposed to Mr. Ellicott were James R. Chapman, electrical engineer of the North Chicago Railway Company, and C. J. Riley, assistant superintendent of the Chicago City Railway Company.

Mr. Ellicott insisted that the objections raised against the adoption of the system in Chicago on account of inadequate drainage facilities were not well founded, and cited the experience of the telegraph, telephone and electric companies in support of his arguments. Then he continued:

"The oft-repeated statements of the street railway magnates of Chicago that the underground trolley system is impracticable in this city because of imperfect drainage are not substantiated by the experience of the city electrician

and the various electrical companies. Where proper precautions are taken in the construction of conduits and man-holes and traps there is no trouble on account of rainstorms, no matter how heavy they may be. I have no doubt that the same care exercised by street railway companies in the construction of an underground system would prevent the trouble which they anticipate in Chicago."

This statement by Mr. Ellicott called Mr. Chapman of the North Chicago Company to his feet. Mr. Chapman said that he had seen West Madison street covered with water from curb to curb for a distance of several blocks on account of imperfect drainage. It was a frequent experience of the company to have the cable slots filled with water after a heavy rain. Under such conditions, he said, it would be impossible to operate an underground trolley system.

Mr. Chapman went into the subject from the standpoint of an electrical engineer, and talked about the difficulties which water and snow and ice offered against a successful operation of the underground trolley. He maintained that the system had proved so impracticable that it had been rejected in all of the big European cities and the preference given to the overhead trolley. Glasgow, Scotland, he said, had chosen the overhead trolley after a thorough investigation, and was now engaged in construct-

ing an extensive system of street railways.

Mr. Ellicott disputed Mr. Chapman's statements concerning the working of the underground trolley under severe climatic conditions, the latter having referred to the recent snowstorm in New York and Washington as an illustration of the unreliability of the system. He pointed to the fact that while the underground trolley had failed to give complete satisfaction all other street railway lines had also failed.

**ALBANY WATER DEPARTMENT RE-
PORT.**

The Water Commissioners of Albany, N. Y., have made their annual report, which shows that the average daily consumption of water for the year was 17,206,000 gallons, being an increase of 600,000 gallons per day more than the previous year, based on a population of 105,000, giving 164 gallons per capita per

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day. The percentage of use by seasons was in winter, 109 per cent.; in spring, 90 per cent.; in summer, 101 per cent., and in autumn, 95 per cent., showing that the increased average consumption in winter is due almost entirely to wasted water. The superintendent recommends the placing of additional water meters to restrain this useless waste, and recommends a reduction of one-third in regular water rents on each building where a water meter is placed. Ninety-four meters were placed during the year, 51 at the request of owners, and 43 by direction of the department, making 1,886 water meters in use. Fifty-five complaints were made by persons using meters, stating that the amount of water registered was neither used nor wasted. After examination in forty-eight cases defective fixtures were found, and in seven the hopper closets were found running. In thirty-seven cases the meter registered less water than was used, and in no case did a meter register more water than was used.

In speaking of the filter beds the superintendent states that early in December contractors had four of the eight filter beds ready to receive the sand and gravel, and the clear water basin was also ready, but the temperature of the water in the river became so low that it

was not possible to properly wash and cleanse the sand and gravel before placing it, and, therefore, the work was necessarily abandoned for the season. Had there been two weeks more of reasonably moderate weather four filter beds would now have been in operation, and the city be receiving a pure water.

Springfield Water is Wasted.

Springfield, Ohio, is numbered among the many cities of that state which owns its water plant. It has been in operation eighteen years and has cost for construction, in round numbers, \$667,000. During this interval the old source of supply had to be abandoned because the supply was insufficient for the demand, and a large sum expended in locating an adequate source of supply and building and equipping a new power house.

Mr. W. C. Powell is the chief engineer and, when called upon by the "City Government" man, said: "The city owns twenty acres of ground out here which is over what practically may be called a subterranean lake. As we have tapped that lake and as it is miles in extent we have an inexhaustible supply of water. Analysis has shown the water to be al-

most chemically pure. Its only fault is a strong impregnation of lime.


"We have a capacity of 7,000,000 gallons per day, but our last report shows that only about 2,250,000 per day was actually pumped. When the pumping capacity is exceeded by the demand it will only be necessary to add more pump power, for the source of supply, in all reasonable possibilities, will never fail."

The entire plant, in equipment and in operation so far as the men in charge are concerned, is of the best. Mr. V. Y. Smith, secretary, and Mr. C. S. Courson, superintendent, are most obliging and painstaking in the discharge of their duties.

Employing the eighteenth annual report of the various departments as the basis for a little figuring shows that the system or plan of operating this most excellent plant is at fault.

The chief engineer's report shows that, in round numbers, 872,000,000 gallons of water were pumped, which was the amount used. By division of the total receipts by the total number of thousands of gallons consumed it is shown that about 4.6 cents is received per thousand gallons. The cost of delivering this same 1,000 gallons to the consumer, without including interest on the bonds nor allowing anything for depreciation

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in value, is about 2.5 cents. When 4 per cent. interest and 5 per cent. depreciation is reckoned in, the cost is brought up to about 10 cents per 1,000 gallons. In reality, then, the plant is being conducted at a dead loss. Even if due allowance were made for the free service for all public purposes, for which the city would have to pay a private corporation, the balance would be on the wrong side.

Judging from the report itself the cause of this loss in operating the plant is due to the non-use of meters. It is evident that water in large quantities is wasted somewhere and the waste could only be located by the general use of meters.

Almost without exception where the general use of meters has been introduced the total receipts for water rental have greatly increased. If Springfield would adopt the meter system and a scale of prices from 6 cents to 20 cents per thousand gallons, she would soon find that the balance would climb on to the right side of the ledger.

New Salt Water Plant for St. Joseph.

The special election held at St. Joseph, Mo., on February 25, to determine whether or not a franchise for a new water works should be granted to Judge R. E. Culver resulted in a victory for the franchise. As the bonded debt of St. Joseph has reached its limit, and therefore the municipality could not build a plant of its own, an arrangement was made with Judge Culver which leads to municipal ownership. A contract is to be made with him to furnish the city with water for twenty years. The rate is \$50,000 a year, some \$15,000 more than at present, but a portion of this is applied on payment of plant, which will become the property of the city at the expiration of the contract. The Sechner Contracting Company of Chicago will construct the plant. It will cost \$800,000.

Water Department Items.

—The village of Elkhart Lake, Wis., is now putting in a system of water works, to be completed about July 1. The Sanitary Construction Company, of Green Bay, are the contractors.

—In the suit of the private water company against the city of Urbana, Ohio, a decision has been given in favor of the water company. The suit was for \$3,737 hydrant rental, which the city withheld, claiming that the contract had expired. The court decided that the contract had another year to run, as the water company contended and ordered the payment of the company's claim with interest.

—Two bills having for their purpose the acquirement of a water plant by the city of Utica, N. Y., have been sent to

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Albany for the consideration of the Legislature. One bill was drawn by the Utica Council; in it the members of the Board of Water Commissioners are named, and they are empowered to agree upon a price for the purchase of the present water company's plant or to arbitrate the value of same. The council bill does not provide for condemnation. The other bill, which was drawn by a meeting of citizens and is said to have the support of Mayor Kinney, provides for the city's acquirement of the plant by condemnation proceedings. It also provides for the appointment of the water

commissioners by the mayor. It is doubtful that either of the bills will pass.

Trade Notes.

—The Compagnie Generale Des Asphaltes De France, Ltd., 32 Broadway, New York, have awarded the contract for the erection of a new pier on their property at the foot of Seventh street, Borough of Queens, city of New York, to James I. Leary, 22 State street, New York city, at a cost of about \$10,000.

—The New Jersey Car Spring & Rub-

ber Company, of Jersey City, N. J., has issued a new catalogue of rubber mats and mattings which it manufactures. The catalogue is almost entirely given up to illustrations and descriptions, together with price lists, of mats and mattings for a great variety of purposes. Illustrations are given of a variety of shapes and patterns of plain and monogram mats for floor use, corrugated stair treads, street cars step treads, carriage mats, table mats, coin mats, as well as a miscellaneous line for barbers, dentists and other uses. The catalogue contains forty-eight pages with sixty-seven illustrations. The company will be glad to send it upon request.

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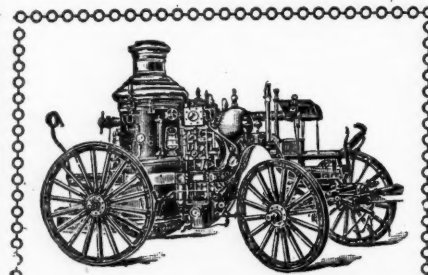
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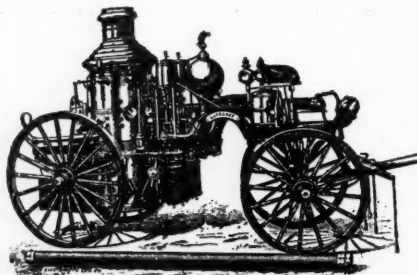
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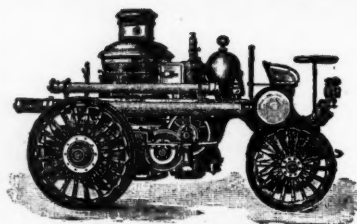
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